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COLORADO MEDICINE

PUBLISHED BY THE COLORADO STATE MEDICAL SOCIETY

VOL. 1 DENVER, NOVEMBER, 1904. NO. 13

LEADING ARTICLE

THE JOURNAL OF THE STATE MEDICAL SOCIETY.

It is now one year since the first number of "COLORADO MEDICINE" was issued. At that time we pointed out that it "was not profitable to make promises or waste good space in proclaiming plans." Now, with the year's work done, it may be worth while to consider its value and significance.

In the first place it was not thought wise or profitable merely to duplicate other medical journals. It could not be assumed that this would be the only journal reaching the members of the county medical societies of our state. It was known that more than half of these members already received the *Journal of the American Medical Association* giving weekly the medical news and a far more comprehensive account of the current medical literature of the world than any state journal could possibly hope to offer. Two other well established medical journals published in Denver also claimed a wide circulation in Colorado, and it was known that the profession of the state were liberal patrons of general and special medical journals published in the larger cities of the East and of Europe. To have attempted to duplicate each valuable and interesting feature found in other medical journals would have been the height of folly.

But there were certain things which no existing journal did for us, which no journal published outside of the state could do, and which are well worth doing. First among these was making us acquainted with each other and with the work that our immediate neighbors and fellows are doing. Next was to afford the stimulation to the study, careful observation and accurate reporting of cases which comes with the knowledge that our fellows will know and appreciate our good work, and criticize our mistakes.

There would be no difficulty in getting published all the papers read before our State Medical Society, and the discussions upon them, without our going to the expense of a volume of transactions or a monthly journal. Getting into print and having our papers filed away in the great medical libraries for the reference of future generations would be just as well accomplished without this trouble and expense. But without our own publications no member of our State Society would be able to put his hand upon all the papers read before it, and very few would ever see any considerable proportion of them. The plan of giving these papers and discussions to some medical journal not under our control to be used for the purpose of floating disreputable advertisements in the furtherance of private financial interests need not be here discussed.

The union and organization of the medical profession is a thing worth working for. To bring neighboring physicians in contact with one another, so that they will consult together, will learn from each other, will stimulate each other to do better professional work, is a thing pre-eminently worth doing. The paper which one of our own members has written upon "Diabetes" may have, on the shelves of the Surgeon-General's library or for the historian a century hence, less value than those of Leroux or Baginsky.

But for those who know him, who can estimate the personal factor in his paper, a factor which enters into all reports of scientific work—for those who practice in the same field, under similar conditions, and who have a personal interest in the man, his paper has a value, and exerts upon its readers an influence that is impossible for any communication coming from an unknown author working under widely different conditions and influenced by different aspirations and sympathies.

But to have the doings of the State Medical Society known to all its members is not the most important thing. The county medical society is the key to true professional organization. If we could have good county societies all over the state without it, the State Society would be of quite minor importance. Its greatest value is that it furnishes a means of sustaining and encouraging the county societies.

It is in the county society that our contact with each other is sufficiently close and frequent to be of most value. It is here that the jealousy of rivals must be overcome; and those who may be called upon at any time to co-operate in the treatment of a case, may become sufficiently well acquainted with each other to enable them to render efficient service. It is in the county society that the ability to write and speak intelligently on medical topics must chiefly be cultivated.

The number of authors and speakers who can be given time in the larger meetings is necessarily limited. But in a smaller gathering there is opportunity for all. Opportunity to see the mistakes of others, and to see our own mistakes as they appear to others. Opportunity to profit by the hints that others can give us, and by the still more valuable suggestions that arise in one's mind while following a live discussion.

The greatest thing the journal of a state medical society can do is to stimulate and build up the county and local societies. The first point is to obtain reports of these societies. If such reports can be obtained and published they will certainly improve as time goes on. Practice in reporting will be assisted by a spirit of emulation among the officers who prepare such reports. The knowledge that the reports will be read by physicians all over the state will stimulate the members to do their best in the way of papers and discussions. And the effort to do one's best always renders possible something still better than he has been able to do before.

We cannot develop a profession able to write well and talk well without having one that will think well and act well at the bedside. To develop such a profession is a greater achievement than to produce a series of volumes for the shelves of libraries. To make physicians rather than literature is the first object of the journal of the State Medical Society. If it succeeds in that, there need be no fear as to the quality or the quantity of the literature which must ultimately be placed to its credit.

E. J.

NOTE AND COMMENT.

Change of Address. Please note that hereafter all communications to COLORADO MEDICINE should be addressed to 1434 Glenarm street. This is the new Academy of Medicine Building, which it is hoped will become the meeting place of some of the Denver medical societies and a sort of home for the profession. We will have more to say of it in future.

Volume One. "Is not COLORADO MEDICINE worthy of an index? Is not the close of the society year a good time to insert it?" writes one of our most active wide awake members. The October number completed the year for our journal; but it seems for various reasons better to have the volumes begin and end with the calendar year. This plan has been adopted by nearly all medical journals, and makes reference to their contents more convenient and easy. It is the plan that has proved best for the Journal of the A. M. A. It was therefore decided that our first volume should contain fourteen numbers. And with the December number, which will complete it, we hope to present an index worthy of the journal, as well as certain lists that the members ought to have, if the officers of all the county societies can be induced to furnish them. While the annual meeting this year was held in October, its date may be changed from year to year so that it is not advisable to have the volumes of COLORADO MEDICINE end with the annual meeting.

Organization. Elsewhere will be found the letter addressed to the County Medical Societies and their members, by the Committee on Organization appointed at the last meeting of the State Society. The adoption of the suggestions there made will greatly facilitate the preliminary business of the annual meetings. It will also help the officers of county societies, to have it known that behind their efforts are the requirements of the larger organization, bearing equally upon every member throughout the state.

The Councillor Districts into which the state has been divided were indicated in our last issue (see page 356). The intention is, ultimately, to have two councillors chosen from each district. But, with the members of the council holding over, it will take a year or two more before the plan will be fully worked out, and the terms of office in the different districts so arranged that both of the councillors shall not retire the same year.

Criminals, Not Doctors.—Every physician worthy the name takes some pride in the standing of the general medical profession; and is at least annoyed when he reads in the glaring headlines of the newspapers of the crime of some "Doctor." Thus the Denver papers have been giving considerable space to sensational accounts of the developments regarding "Dr. Watson," a "Denver Doctor" held in Missouri for the murder of his wife. Probably few people who read these headlines know that the so-called "Doctor" is not a member of the medical profession, but an osteopath; a class of people who, according to our sapient Judge Mullins, are not engaged in the practice of medicine at all. A little investigation of these criminal "doctors" will show that not one in ten of them has the slightest claim to association with the medical profession. A few are dentists, a few are veterinarians, some more belong to the numerous irregular "schools" of medicine; but the majority have commenced their criminal career by the assumption of the title to which they had no legitimate claim, as one means of imposing upon the gullible public.

ORIGINAL PAPERS

A REVIEW OF THE LITERATURE OF DIABETES MELLITUS IN CHILDREN WITH REPORT OF A CASE.

By F. E. WAXHAM, M. D., Denver.

We are all inclined to believe that diabetes is a rare disease of childhood. It certainly is true that individually we see but a few cases, but the literature, however, abounds with many recorded cases. Excepting in the very young, under two years of age, it is not an infrequent affection, and we would emphasize the importance of systematic urinalysis in children as well as in adults. The cardinal symptoms are the same as in later life, consisting of thirst, ravenous appetite, acid reaction of urine, high specific gravity, the presence of sugar, polyuria, presence of acetone in severe cases, gradually increasing debility and emaciation and death, as a rule, in coma.

The etiological factors are also considered the same as in the adult, the principal ones being disease of the pancreas, disease of the liver, heredity, injuries to the head, nervous shock. Some look upon congenital syphilis as a causative factor. Cases that have recovered under anti-syphilitic treatment would indicate this to be a fact.

The prognosis is strangely unfavorable and the younger the patient the more rapid the case and the more quickly fatal.

REVIEW OF THE LITERATURE.

Bogoras *(Archiv. fur Kinderheilkunde,* 1899, Vol. 27, p. 243-84) reviews the literature of diabetes mellitus in childhood very thoroughly. To the 130 cases collected by Wegeli, he adds 34 cases from recent literature and 20 unpublished cases, or 184 cases in all.

After analyzing the subject, he calls attention (1) to the importance of heredity in the causation, (2) to the characteristic course, (3) to the almost fatal termination, (4) to the constantly negative findings at autopsy, and (5) to the absence of complications.

The most famous doctors of our days studied thoroughly this disease: Kulz, von Mehring, Minkowski, Pavy, Senator, Naunyn, von Noorden and others, and arrived at the conclusion that this disease is not so rare as before supposed.

Diabetes Mellitus in childhood came first under observation in 1813. The first case was published by Mott in Hufeland's Journal. The next cases are of English authors: Vernables (1825), Dewees (1826). Of French authors, Bouchut was the first who studied this disease, followed by Becquerel (1849), Durand Fardel (1869).

In Germany, Kieser studied it first in 1841, then followed cases by Heine (1849), and Hauner (1850).

Even in 1872, Senator said that this affection was extremely rare in childhood, and Niedergesass (1873) adds that even clinicians had not always seen this disease in children. But by and by the cases became more numerous, so that E. Kulz (in Gerhardt's Handbook) published three cases of diabetes mellitus.

In 1890, Stern collected for his inaugural dissertation, under the direction of Baginsky, 90 cases.

Outside of the works of Redon and Leroux (in France) no important work on this subject has been published. Redon (1877) has 6 cases of his own besides a few he collected. Leroux has 4 cases of his own and collected 66 cases, which, with a few exceptions, had been already collected before, either by Redon or by Kulz.

Baginsky's work on diabetes mellitus in childhood is a step forward in the right direction; that is, the study of the process of metabolism in this affection. It was published in 1893. His case was that of a five-year-old girl.

This paper was followed by a more important one of Wegeli, who collected 102 cases. To these he added 28 unpublished cases: 130 in all.

The author gives the literature of 34 cases. A synopsis in two or three lines of each case.

Then follows the history of 20 cases accompanied with tables, and the paper ends with a bibliography of three pages.

Bogoras thinks that one is not justified to consider diabetes in childhood as an independent disease, that is, a disease by itself. As far as he knows, 500 cases have been recorded (in the literature). He says that this affection in childhood is composed of different diseases, which have only one symptom in common, that is, the presence of sugar in the urine, and as such he wants to consider diabetes mellitus in children. Not every case has been recorded and very likely the majority of cases escape detection.

The 500 diabetic cases as found in the literature are composed thus. (Dickinson's 388 cases and Roberts' 308 cases are not taken up in this table, while it cannot be established how many cases are diabetes insipidus and how many diabetes mellitus.)

TABLE

	Below 1 year	1 to 5 years	5 to 10 years	10 to 15 years	GIRLS	BOYS
Saundby	2	28	48	81	79	80
Kulz ...	1	13	24	49	46	38
Stern ...	6	23	20	41	47	31
Wegeli ..	4	28	35	63	61	58
	13	92	147	234	233	207

This table shows that diabetes increases with the age; only 13 cases below one year.

The literature tells us also that 30 per cent of all cases ended in coma. Of his own 20 cases, 10 ended in a state of coma.

According to Senator, nearly all cases end fatally in a few weeks.

DURATION OF DISEASE.

Age of Children.

TABLE

DURATION	Less than 1 year	1 to 5 years	5 to 10 years	10 to 15 years
1 month.......	1	13	5	18
6 months.......	4	15	14	20
1 year	1	2	7	9
2 years		1	6	21
3 years and longer		1	3	25

The age does not play any part in the risk. As to the outcome, literature reports that in 500 cases, 30 cases were considered as cured. But only in 3 cases, the time as to the considered "cured" exceeded three months.

Hodge, (Geo.) A Report of Three Cases of Diabetes Mellitus. (*Canadian Practitioner and Review.* 1901. Vol. 26, p. 364.)

First Case. Boy, 16 years old; came for consultation August 11, 1896. His case was hopeless and the author does not state what became of him.

Second Case. Girl, 7 years old, April, 1900. Examination of urine showed it acid, sp. gr. 1034; albumen, a slight quantity; sugar in large quantity; no diacetic acid. She gradually sank, and died on June 23rd. Child was ill for a little over three months.

Third Case. Girl, 5 years 4 months old, December 16th, 1900. Examination of urine revealed the hopelessness of this case. It was clear; sp. gr. 1045; sugar in large quantity; acid in reaction; no albumen.

Amount passed during the 24 hours after the urine was examined and the diet restricted, 30 ozs. No auto-acetic acid. Died December 22nd. This case was under examination only five and a half days.

Diabetes mellitus is always a grave disease, and especially so in young adults and children. Under a recent method of treatment a diet regulated in *quantity* as well as in *quality*—many cases, which would heretofore have run an unfavorable course, are now treated with a considerable measure of success.

The treatment should aim at restoring the sugar-consuming power of the tissues.

Orlow, N. A. A Case of Diabetes in a Nursling. (*Vratch,* 1901, Vol. 22, No. 9, March 3, 1901). Abstract in *Phila. Med. J.,* 1901 (7), p. 808.

Reports a case of diabetes in an infant four to five months old. Urine contained large quantities of sugar, as determined by Trommer's, Nylander's and the indigo tests. The cardinal symptoms of diabetes, namely, polyuria, polyphagia and auto-phagia, were present. Child had also a number of boils on its body. Died on twelfth day. Autopsy revealed an acute broncho-pneumonia, with pulmonary edema, acute intestinal catarrh, and a *serious effusion in the third ventricle.* The latter, according to the author, was the etiologic factor in the disease. The claim is made that this is the *first case* of genuine diabetes in an infant recorded.

Noskow, W. I., in the same Russian paper as above reports the case of boy of 3½ years old, after an attack of *grippe* developed an enormous appetite, extreme thirst, emaciation, debility and polyuria. Urine: 4.8 per cent of sugar and acetone. Died in a state of coma which lasted for 48 hours. Author believes that *hereditary syphilis* played an important part. The child's father suffered for a number of years and finally died from syphilitic affection of the nervous system.

Young, Wm. E. Report of a Case of Diabetes in an Infant (*Arch of Pediatrics,* 1901, (18) 198).

Male foundling about six months old; admitted to the hospital and did very well for the first fourteen days, when he began to vomit. Solid green and undigested; appetite good at all times; skin dry and wrinkled, tongue red; baby was very nervous; a swelling was noticed in both lumbar regions; abdomen slightly distended. Palpation of kidneys showed them to be about four times their normal size; liver somewhat enlarged; temperature never above 99°; urine=Spec. Gr. of 1030, about 5 per cent sugar, very little albumen, and a few casts. Died at end of third week, or just one month after first symptoms of diabetes appeared; contracted pneumonia.

Postmortem: Kidneys twice natural size; coertical layer was grayish-white and indurated. Marked hyperemia, and inflammation of the parenchyma. Mucous membrane of bladder inflamed and liver enlarged; all other organs normal.

West in 1859 reported 700 cases, and only one under five years.

Ashby and Wright report in 1899, 111 cases from 16 months to 15 years.

Oppenheimer in 1900 reports but two cases.

Holt in 1898 quotes: 1,360 cases by Pavy and only 8 were under ten years of age. 700 cases by Proutt, with only 1 under ten years; 380 by Meyer, with only 1 under ten years.

With regard to the cause, West claims that when the process of digestion and assimilation are seriously disturbed in early life, the functional activity of the kidneys become excessive and disordered.

Ashby and Wright state that there is often a history of diabetes in the family.

Pavy reports a case of diabetes in a two-year-old child who died, the third generation with the disease.

In the differential diagnosis the constant presence of sugar, with rapid emaciation and gastro-intestinal disorders, proves the diagnosis. Marasmus and athrepsia must also be considered in the diagnosis.

Treatment: Dr. Venables recommends milk and iron phosphates. Many give codeia and saccharine, and some give bromide of arsenic to enrich the blood cells and help oxidation. Universally it is agreed that milk is the most beneficial diet.

Prognosis is bad and probably fatal in young children. Many cases die of asthenia and diabetic coma, and some develop pneumonia, which is fatal, as it was in this case.

Haas, Leopold F. W. Reports Two Cases (*Journal A. M. A.*, 1900 (35), p. 1254).

The Etiology of this disease in children is obscure. Heredity plays an important part in its causation, while a family history of insanity, phthisis or gout is frequently obtainable. Patients generally belong to the wealthier class; the Jews are often the sufferers.

The immediate causes are variously stated to be: Injuries of the nervous system, especially of the floor of the fourth ventricle; lesions of the pancreas, the liver and kidney. Its occurrence as a sequel to some infectious diseases, such as rheumatism, typhoid fever, diptheria, malaria, and syphilis, has given origin to the microbic theory of diabetes.

Normal blood contains 0.05 per cent of sugar, and the urine of a healthy person contains traces. Ten times as much sugar is found in the blood of diabetics, while the urine contains from 2 to 15 per cent.

In 1849 Bernard proved that the liver contains sugar after death, and he inferred that the liver was a sugar-producing organ, an inference which has since been substantiated. Pavy showed that sugar can be artificially produced from proteids, and assumed that the body can also do this.

Diabetes has been caused experimentally by puncturing the floor of the fourth ventricle—diabetic puncture—but diseases of this locality, although met occasionally, are not very common.

In 1877 *Lancereaux* advanced the theory that the pancreas was affected in all cases of diabetes.

Lepine suggested that the pancreas secretes a sugar-destroying ferment, but the exhibition of pancreatic extracts has had no action in controlling the disease.

Lepine and *Boulud (Gaz. hebd. de. med. et. de Chir.,* March 28, 1900), reported that the urine of diabetics contains a diabeto-genous substance which produced an intense glycosuria when injected subcutaneously in dogs and guinea-pigs.

Saundby says: "In children and young persons, diabetes is an acute and rapidly fatal disease, lasting only weeks or months, or at most one or two years, but even in children cases have been known to extend over five, six or more years."

A very few cases have been reported cured, but these are generally rgarded with suspicion.

History of two children in one family. Case 1. Girl, nine years old. Case 2. Boy, five years old. The family history was tuberculous and the body had had an injury. The only symptom present was glycosuria, and both were doing well on a moderately strict diet.

In the discussion, H. Stern referred to an investigation in which he found out that out of 1,867 deaths from diabetes, only 13 were under five years of age, and but 5 of these were in the nursing period. Stern is of the opinion that diabetes in children is quite different from that in adults.

Le Gendre *(Arch. de med. des Enfants,* March, 1901. Also *Soc. de Pediatrie de Paris,* Nov. 14, 1899).

Reports a case of diabetes mellitus in an infant 22 months old. No organic lesion was found, except perhaps a slight increase in the size of the liver. A glass of water was the only thing that would quiet the child. Baby drank so greedily that the idea of diabetes was at once suggested. It was then found that in 24 hours 750 grammes of urine was secreted, which contained 13.87 grammes of sugar.

Despite the substitution of a nitrogenous diet for a farinaceous one and despite the usual treatment, glycosuria increased, emaciation progressed, acetone appeared in urine, and five weeks after the first recognition of the disease the child died in coma.

The interesting point in the observance is the absence of any cause except a bad family history in both parents. Author thinks that the diabetes can be attributed only to the double heredity and to the very peculiar circumstances of procreation.

Baumel (L.). *(Arch. de med des Enfants,* March, 1901).

Author reports *a cure of diabetes* in a six-months-old infant, breast-fed and non-syphilitic. Symptoms: Polyuria, thirst, general edema, glycosuria, with 1 gram of glucose per liter. Treatment: Child recovered with calcium lactophosphate and regulation of diet. Author thinks it possible that detention caused the condition reflexly.

Lemonnied. *(Arch. de med. des Enfants,* March, 1901).

Case of a girl who had been treated successfully in the first months of life for congenital syphilis. Diabetes set in when 7 years old, for three months, with emaciation, thirst, glycosuria, polyuria. Under anti-syphilitic treatment by mercurial inunctions and potassium iodid, recovery was complete in four months.

Lemonnier believes that syphilis may cause diabetes through a lesion of the nervous system or pancreas, or through the syphilitic diathesis alone, treatment being successful in either case; or, syphilis in the parent may cause the development of diabetic dyscrasia in the child, and here treatment is unsuccessful.

Cotton, A. C. *(Journal A. M. A.,* 1901 (Sept. 7), Vol. 37, p. 638-41).

Girl, 6 years and 3 months, developed diabetes after an attack of measles, the distinctive symptoms appearing in about four months after the measles. Family history showed no diabetes, gout, tuberculosis or syphilis. Girl died about eleven months after attack of measles, in dyspneic coma. Author mentions Stern's statistics concerning diabetes mellitus in New York City.

1. New York for 11 years, 1889-1899:

Total deaths	1867
Average per annum	168*
Deaths under one year	4
Deaths under ten years	24

2. Diab. Mell. in Chicago for four years, 1897-1900:

Total deaths	418
Average per annum	104½
Deaths under one year	3
Deaths under ten years	15

Being hereditary, Cotton thinks that prophylactic measures may well be employed in case there is a history of gout, diabetes, tuberculosis, syphilis, in the immediate ancestry; these should include the restriction of saccharine foods, the avoidance of mental or physical strain or shock, etc.

If incontinence of urine or muscular debility, irritability, or emaciation appears, the proyhylactic measures should be made more rigid.

Mortality is high in children, and the diet needs to be very carefully regulated. The utmost care of the diet and hygiene is even more important in children than in adults, since a higher ratio of metabolism is essential to growth in addition to repair. The reduction of carbohydrates should be gradual. Too much stress cannot be laid upon the importance of protecting the child from a sudden lowering of the temperature.

Rondet. *(Lyon Medical,* 1901 (97), p. 15.)

Diabetes of acute course in a boy of 15 years. Duration, two weeks, in which first signs appeared. Great thirst. He drank at least five litres of water in 24 hours. He died in coma. It was a case of diabetic coma, on account of large quantity of sugar in urine. Nocturnal incontinence until he was 12 years old, four or five times a month, or daily in case he got frightened. Coma followed, and to save the boy, an intravenous injection of sodium bicarbonate was made; 600 grains were administered. Consciousness returned, patient improved decidedly. Coma came on again, and injections were repeated. Consciousness returned for 24 hours, followed soon by death.

Marchi. (*Gazz. med de Torino,* N. 26, 1901.)

Diabetes in a patient of 12 years. Urine, 6 to 7 litres a day. This quantity was, by strict diet and opium and tannin medication, reduced to about 1 litre. Sugar: Excretion of sugar was reduced only from 10 per cent to about 7 per cent. Excessive hunger and thirst disappeared. There was a free excretion of diacetic acid, even with a good general condition, and an increase in weight.

NEW CASE.

The case that I would report is unique, on account of the association of the diabetic condition with intestinal worms, which undoubtedly were the etiologic factor. In all the literature of diabetes mellitus, I find no such mention among he causative agencies. The case was a boy, 2½ years of age, whose parents were of American birth. There was no hereditary predisposition to the disease, no history of tuberculosis, syphilis, gout, or nervous affection in either parents or grand-parents. There was no history of injury or of nervous shock, and the child had never had any of the infectious diseases excepting whooping cough.

It was remembered that six months before noticing the first symptoms of diabetes, the child passed a number of lumbricoid worms, and occasionally after that, when a vermifuge was given, they were passed in large numbers and in size varying from six to nine inches in length. It was estimated that at least 150 were expelled. It seemed quite impossible to get rid of them and they persisted up to within a few days of death in spite of santonin and calomel, and later spigelia and senna. No disease of the pancreas, liver or kidneys could be demonstrated. It seemed fair to believe that the diabetes in this case was attributable to the intestinal parasites. It might have been that some of these lumbricoid worms entered the hepatic ducts, and by their presence and irritation altered the glycogenic function of the liver, or the function of the liver may have been disturbed reflexly through the nervous system as a result of the irritation from the large number of worms in the intestinal tract.

The boy was exceptionally bright and precocious and of a finely organized, sensitive, nervous temperament. The first symptoms noticed were peevishness, ravenous appetite, excessive thirst and polyuria. These symptoms led to an examination of urine, which gave acid reaction, high specific gravity (1038) and the presence of sugar. A quantitative examination by Purdy's test gave 8 per cent of sugar or 38.4 grains per ounce. Vermifuges were given, also codein and arsenic, and the diet carefully regulated.

Under this treatment the amount of sugar was rather rapidly reduced to 3½ per cent, but the debility gradually increased, and there was persistent loss of strength, and notwithstanding a most careful diet and the administration of codein, arsenic and ergot, the amount of sugar in the course of a few weeks again increased to 8 per cent, and within three months from the time first seen, the boy died in diabetic coma. Unfortunately, no post mortem could be obtained. I would here acknowledge the courtesy and cooperation of Drs. McDowell, Andrew and White, of Longmont, Colo., in the care and treatment of the case.

From the careful consideration of the literature, we would deduct the following conclusions:

1. Diabetes occurs more frequently in children than is generally supposed.

2. The general practitioner should recognize the necessity of careful and systematic urinalysis in the scientific diagnosis of diseases of children.

3. As most authors look upon disease of the pancreas and its consequent loss of function as the most common pathological condition, and as it has been found that the removal of this organ in animals at once produces diabetes, it would seem reasonable that the administration of the pancreatic extract should give as satisfactory results as does the administration of thyoid extract in cretinism, due to the loss of function of the thyroid gland. It must be admitted, however, that its administration, so far, has not been attended with brilliant results. A further and more extended trial, I believe, should be encouraged.

Bibliography.

1. Wilson. Lancet 1896 (2) 1376,
2. Allen (D. P.). Arch Pediat. 1889 (6) 716,
3. Winkler (A.). Munch. Med. Wch. 1886 (33) 46,
4. Sterling (S.). Centralb. f. Kinderh. 1897 (2) 109,
5. Stern (C.). Arch. f. Kinderh. 1889-90 (11) 81,
6. Anderson (T. McC.). Glasgow m. j. 1887 (27) 344,
7. Thomson (R. S.). Glasgow m. j. 1885 (23) 59,
8. Vignes. J. de Med. et chir. prat. Paris, 1882 (53) 310,
9. deBary (J.). Arch. f. Kinderh. 1892-3 (15) 104,
10. Watkins-Pitchford (W.). Brit. M. J. 1892 (1) 1136,
11. Weber (L.). Am. J. Obst. 1884 (17) 102,
12. Gaginsky (A.). Arch. f. Kinderh. 1897 (22) 257,
13. Bell (W. B.). Edinb. M. J. 1895-6 (41) 709,
14. Wegeli (E.). Arch. f. Kinderh. 1895 (19) 1,
15. Smith (C. W.). Indiana M. J. 1896-7 (15) 262,
16. Simpson (F. C.). Am. Prac. and News. 1892 (N. S., S. 13) 201,
17. Rachford (B. K.). N. Y. M. J. 1889 (1) 629,
18. Bennet (E. H.). Coll. and Clin. Rec. 1886 (7) 211,
19. Simon (J.). Rev. mens. mal. enf. 1885 (3) 477,
20. Dale (J. Y.). Med. News 1887 (51) 676.
21. Deane (W. H.). Med. Record, N. Y. 1888 (38) 97,
22. Dreyer-Deutsche Med. Wch. 1897 (23) 596.
23. Duke (E.). Birmingh. M. Rev. 1896 (39) 163,
24. Simon (J.). Rev. Mens. mal. enf. 1887 (5) 450,
25. Seiffert. J. aheb. f. Kinderh. 1898 (48) 12,
26. Murphy (W. J.). Albany M. Ann. 1897 (18) 362,
27. Mayer (j.). Berh. Cong. f. inn. Med. 1897 (15) 577,
28. Edwards (J.). Brit. M. J. 1885 (1) 279,
29. Cnoph. Munch. Med. Woch. 1895 (April 30),
30. Kahn (L. Z.). Arch. Gen. de med. 1896 (2) 760,
31. Holeczek (W.). Weiner Klin. Wch. 1889 (2) 864,
32. Garnerus (H.). Deutsche Med. Wch. 1884 (10) 697,
33. Garber (F. W.). Tr. Mich. Med. Soc. 1893 (17) 82,
34. Frew (W.). Glasgow Med. J. 1887 (27) 272,
35. Townsend (C. W.). Boston M. & S. J. May 11, 1899.

DUODENAL ULCER CAUSED BY PRESSURE FROM STONES IN GALL BLADDER.

By G. H. CATTERMOLE, M. D., Boulder.

This paper is based on the pathologic findings in a case which came to autopsy in August of the present year. I will give you such history as we were able to obtain, then review the special features of this case and present the pathologic specimens.

The case history is as follows: C. H. P., male, aged 60 years. Began to develop arthritis deformans at the age of 20. This had resulted in marked deformity of the hands and feet, and there was ankylosis of the elbows, hips and knees. He has not been able to dress himself without assistance for 30 years, but during that time he has had no acute sickness. His appetite and digestion have been good for a man who could take no exercise. His bowels have moved regularly. He has not had colic, nor has blood ever been noticed in the stools.

For the past six months he has had occasional attacks of nausea, and for the past few weeks would sometimes vomit a little mucous. He had ridden from Nebraska to Colorado in a wagon, and for the last week had been nauseated when helped out of the wagon. For three or four days prior to death he had been constipated. On August 19th he took medicine to move the bowels, which acted on the following day. In the evening of August 21st he was taken with sudden pain in the region of the liver, and extending behind to the right shoulder. A physician was called, who gave him morphine hypodermically, which relieved the pain. He was given an enema to move the bowels,—without result.

The following morning the patient was placed in the wagon and they moved on for about ten miles, but his condition became so bad that he was placed aboard the train at Marshall and sent to University Hospital. A physician who saw him in the afternoon of August 22nd found him pulseless and gave a hypodermic of strychnia. The patient was practically moribund when he arrived at the hospital, at 7 p. m. There was no pulse at the wrist; he could not swallow water; the abdomen was very much distended and tympanitic, especially over the liver; there was no peristalsis, nor tumor. He said he had no pain. There had been no vomiting nor passage of gas or feces during the day. He was very restless, and begged to be allowed to sit up. He died at about 8 p. m., August 22nd.

An autopsy was held soon after death. On cutting through the peritoneum, just below the ensiform cartilage, a large amount of gas and brownish fluid escaped. All serous surfaces were congested and there was considerable deposit of fibrin on the intestines and parietal walls. About the liver, stomach and duodenum there were adhesions, showing where fluid had been walled off. The gall bladder was contracted down over two large gall stones, and where the gall bladder came in contact with the duodenum, an ulcer had formed, perforating the bowel.

This ulcer was on the upper surface of the duodenum, about one-half inch from the pyloric opening of the stomach. On the peritoneal surface it was one-half inch in diameter, the edges beveled in so that the opening through the mucous membrane was about ¼ inch in diameter. The edges of the ulcer were hard and fibrous, showing a long continued irritation.

In considering the normal course of round perforating ulcer of the duodenum, it seems to have practically the same etiology as ulcer of the stomach. It is seldom found below the common opening of the bile and pancreatic ducts. The reason given for this is that "it probably follows nutritional disturbances in a limited region of the mucosa, which results in the gradual destruction of this area by the gastric juice." This holds good for the upper part of the duodenum as well as for the stomach. But in this patient the ulcer evidently began by erosion of the peritoneal surface and later by digestion of the mucosa.

Chlorosis, anemia, and cachectic states, which are commonly associated with ulcer of the stomach, are not often found in persons suffering from duodenal ulcer.

Extensive burns of the skin seem to cause ulcer of the duodenum; they were found in 16 of 124 patients dead from such burns. "Kyanitzki has separated from the blood of animals, suffering from extensive burns, a toxin which, when injected into other animals, will cause (among other phenomena) duodenal ulcers." (Johnston, *American System of Practical Medicine.*)

Pressure of the costal margin against the stomach wall is thought to favor the development of ulcer by inducing local anemia and atrophy of the mucosa. This theory is borne out by the frequent occurrence of ulcer in persons following occupations which require a stooping position. If the pressure of the costal margin favors ulcer starting in the mucous membrane, we may expect that pressure of any kind may sometimes cause ulcer starting on the peritoneal surface, as in this case. It is not easy to understand why pressure between the gall bladder and duodenum should cause atrophy and ulcer of the intestinal wall and have no effect on the wall of the gall bladder. Ulcer seems to be favored by lithemic conditions (diminution of the normal alkalinity of the blood), and in this man with arthritis there was no doubt a vitiated condition of blood and tissues.

Experimentally embolism has proved to be a cause of ulcer. "Many cases have occurred in connection with disease of the heart or of the blood vessels." Ulcer of the stomach is from 9 to 30 times more frequent than ulcer of the duodenum. Writers differ as to the absolute frequency of duodenal ulcer. Guy's Hospital reports show that it was present in only 0.4 per cent of all autopsies; while Letulle found it in 7.8 per cent of 52 cadavers taken at random. Probably the majority of duodenal ulcers heal without having been diagnosed, and the scars, or even open ulcers, are overlooked in an ordinary autopsy.

We are all familiar with the pathologic anatomy of peptic ulcer. It usually begins in the mucosa. The floor of the ulcer may be formed by the submucosa or the muscular coats, or where it perforates, the floor may be formed by the adjacent organs or tissues. The ulcer may be round or oval, and its edges smooth or ragged. The ulcer is usually broadest on the mucous surface and grows narrower toward the peritoneal surface (funnel shaped.)

The interesting features of this particular case are: that the ulcer was caused by pressure from an adjacent organ; the pressure was probably long continued, as the stones are large and the edges of the ulcer are fibrous, showing prolonged irritation; the ulcer is largest on the peritoneal surface, sloping toward the opening in the mucosa. It is probable that the sedentary life of this crippled man lessened the danger of early perforation. There was evidently some escape of substance from the bowel weeks or even months prior to his death, but this substance from the bowel was walled off from the general peritoneal cavity until the jolting of the wagon finally broke down the protecting adhesions and allowed general infection of the peritoneum.

The symptoms usually seen in peptic ulcer are: Indigestion, nausea, vomiting, hemorrhage and pain. In this man's case digestion was good; there was some nausea at times during the last six months; vomiting had only been present for about two weeks; there was no hemorrhage, so far as his friends knew; there had been almost no pain until twenty-four hours before death.

Many ulcers starting on the mucous surface of the duodenum probably run a course similar to this one. In cases that are recognized as duodenal ulcer, perforation is common and almost invariably fatal. "Of 262 cases reported by Collins, perforation occurred in 175." (Johnston *loc cit.)* 67 per cent.

The majority of the cases where perforation occurs prove fatal within twenty-four hours. Just how many duodenal ulcers may heal or continue to exist without causing serious symptoms is uncertain. If we credit Letulle's statement that 7.8 per cent of cadavers show evidence of duodenal ulcer, we must believe that it is a very common condition and that in the great majority of cases it causes few symptoms, or else the symptoms are ascribed to some other cause.

As Mayo has pointed out, there are many ill-defined conditions caused by gall stones, and this case is another added to the list.

Authors quoted not stated.

SCHOOL SANITATION.

By F. G. Byles, M. D., Denver.

Of all things most desired by the people of this country, health and wealth stand first. Of these the former is of the greater importance. As the hope of the Nation is in the youth of the Nation, so, I believe, the health of the Nation will depend upon the health of its school children. No subject is of greater importance than the health of our children during these years of growth and development; and, it appears to me that this subject has not received the attention that it deserves.

Our schools should aim to bring about the highest development of the physical and moral powers as well as the mental—"to train to good citizenship." This they do not do as they should. The mistakes of our school authorities in this respect are often serious and far reaching in their effects. The young man about to engage in business in this age, when only the fittest survive, can ill afford to be handicapped by a hollow chest and weak muscles caused by unhygienic conditions of his school life. The young woman, about to assume the duties and responsibilities of motherhood, should not have occasion to censure the school authorities for her frail physique and over-developed nervous system.

It appears to me that the medical profession, to which the public should look for advice in all things pertaining to health, ought to do something to secure a proper recognition of this important subject by those in control of our schools.

We believe that hygiene and sanitation should be taught in all schools both as a regular study and by practical demonstration on the buildings, grounds, and pupils themselves. This could best be done, in my opinion, in the cities and larger towns at least, by the selection of an intelligent physician well versed in sanitary science to act as school health officer, or school physician, or school inspector. Such an officer should be chosen by the school board, or at least work in harmony with them, and also have authority of the City Health Officer, in matters of quarantine and disinfection. The duties of such an officer would require him to see that proper hygienic conditions of the buildings and grounds were maintained; to see that the subject of hygiene was properly taught from suitable text-books by competent teachers; to see that all text-books were printed on such paper and with such type as to be least injurious to the pupil's eyes; to assist the teacher in deciding the amount of school work to be assigned to pupils in feeble health; to see that all the children are properly vaccinated; to examine the eyes and ears of all pupils each term, and the mouths and throats of such cases as would suggest the presence of adenoids or greatly enlarged tonsils; to inspect personally, or by means of assistant inspectors, all pupils every day to detect, at the earliest possible moment, cases of infectious disease, and to keep an accurate record of all his work.

School architecture is of as much importance as the architecture of our homes. The inspector should see that the school rooms are ample in size and that the air conduits, both inlets and outlets, are of sufficient size and so constructed as to allow of good ventilation. As eighteen hundred to two thousand cubic feet of fresh air are needed for every pupil per hour, and as the air of a room cannot well be changed oftener that three times an hour without causing uncomfortable and injurious draughts, each pupil should have from six hundred to seven hundred cubic feet of room space. For a class of twenty this would require a room 30x30x15 feet. In cold weather this air should, of course, be properly warmed. There should be an abundance of light coming from high in the room and from behind and to the left of the pupils. The walls of the school rooms should be painted a neutral tint, which is less trying to the eyes than glaring white walls. Blackboards should be on the sides of the room opposite the windows, and of a dead black, not a glossy black surface. The inspector should see that the seats and desks are of a proper height for the pupils. The seats should not be so low as to cause the child's knees to point toward his chin or so high that the child's feet cannot touch the floor. They should be wide enough to support the whole length of the thigh. The backs should be slightly curved to conform to the shape of the body, and not too high. The desk should not be too high, or too low, or too far from the seat; if too high it tends to cause spinal curvature by keeping the child's elbow too high in writing, thus compelling him to sit in a constrained position. If too low or too far from the seat it tends to make the child stoop shouldered and hollow chested. Suitable cloak rooms should be provided on every floor. These should be so constructed as to be well ventilated and easily disinfected, having separate sections for the wraps of each child. Of course toilet rooms containing wash stands and sinks for both sexes should be on every floor. All school rooms and especially the toilet and cloak rooms should be kept scrupulously clean, and should be frequently disinfected.

One of the things that every one should know is how to take care of his health. The laws of health and right living should be taught to all children in all grades of all schools, and there should be some one connected with the school, whose duty it is to see that this subject is correctly taught by capable teachers. If the teaching force is incapable, a course of instruction or a conference class should be conducted, for the benefit of the teachers and assistant inspectors on the subject of school sanitation. Education of the youth on this subject would result in benefit to themselves and to the public. It appears to me that the public are getting away from the medical profession and are following after false gods, because they do not know what the regular profession are doing. Whatever advancement is made by us is locked up in our medical books and journals and never reaches the public except as garbled, distorted and robbed of most of its truth by "our friends the fakirs." If the public knew more of physiology and hygiene they would be less easily duped by the advocates of Osteopathy, Christian Science, and the very numerous absurd fakes abroad in the land. If the pupils were taught in school that sickness required the care of a physician, and if, when taken sick in school, they were advised by the school inspector to go home and call in their family physician, we believe affairs would be different.

The care of the eyes of school children is of the greatest importance. The eyes of all pupils should be tested at the beginning of every school term. Out of 30,095 children examined in the Cleveland schools in 1899 and 1900, more than 20 per cent. were found to have defective vision. In Minneapolis out of 25,696 pupils examined, 8,166, or 32 per cent., were trying to do school work with defective eyesight. These visual defects increase as the classes advance. Cohn examined the eyes of 10,000 children of all grades and found 1 per cent. of Myopia in the pupils of the country schools, 5 7/10 per cent. in elementary schools, 20 4/10 per cent. in grammar schools and 30 3/10 per cent. in the colleges. About the same proportion of increase of visual defects with advance in grades was found in the schools of Buffalo, Brooklyn and other cities, showing the necessity for making the tests at least once a year. In this city the school principals have been making a very superficial test for three or four years, but I have been unable to obtain any tabulated statistics. Prof. Zirkle of the Elmwood school has given this subject especial consideration, but the number of his observations is of course limited.

Tests of hearing are of almost equal importance. Very often pupils who are supposed to be dull are found to be suffering with defects of hearing which, when properly treated, permit the pupil to stand at the head of his class. Many children are greatly incapacitated for efficient school work by enlarged tonsils and adenoids. If these cases were recognized by the school inspector and referred by him to their physician for treatment, permanent benefit would result to the child.

Probably the greatest benefit from the daily inspection of school children is the early recognition of infectious diseases and the prompt removal of the infected child from the rest. It is a well known fact that the infectious diseases of childhood, diphtheria, scarlet fever, measles, et cetera, are more prevalent during the months in which the schools are in session. As soon as the schools open the white and red signs begin to be seen on the houses, and they soon grow infrequent after the close of the term. The health reports of this city show that during the vacation months of last year, July, August and September, there were sixty-one cases of scarlet fever and diphtheria reported per month, but an average of ninety-two cases per month of these diseases during the remaining nine months in which the schools were in session. In Boston in 1900 the school inspectors found 4,023 cases of infectious disease attending school, the total enrollment being 15,500. In ten months inspection of Philadelphia schools, 3,446 cases of infectious disease were found. During the first five months of school inspection in Newark, New Jersey, in less than 6,000 pupils, more than 1,700 cases of infection were found. In Chicago in four months' time 1,417 cases of diphtheria and 306 cases of scarlet fever were found in the school rooms. With these figures before us, the utility of school inspection needs no additional proof. Probably one-half of all cases of diphtheria attend school at least one day after the infection begins. Not so many cases of scarlet fever are found in the schools as diphtheria, but the effect of school inspection in lessening the spread of this disease is probably greater than of the former. The greatest danger from scarlet fever is in the too early return of the pupil. In all cities where proper inspection has been given a trial, it has had a marked effect in lessening the number of cases of infectious disease. This is brought about in several ways. It makes possible the earlier quarantine of the infected ones and the burning of their books and disinfection of the school room. It prevents the too early return to school of those recovering from such diseases, inspectors being required to make a personal examination of the pupil before he is readmitted to the school. It often leads to the detection of unreported cases at the homes of the pupils, especially where the teachers report to the physician the names and addresses of all those detained more than four consecutive days by illness. It impresses the parents with the necessity of care not to spread the infection among their neighbors. In addition to diminishing the number of cases of infection it affords an opportunity to impress the parents with the necessity of proper care and treatment of those who are sick. This is especially necessary in cases of the so-called trivial diseases such as measles, whooping cough and chicken pox. The United States Census for 1900 shows 6,333 deaths from scarlet fever, but 12,866 deaths from measles, and 9,958 deaths from whooping cough, twice as many deaths from measles, and one and one-half times as many deaths from whooping cough as scarlet fever. This fatality must certainly be due to lack of care on the part of some one, most likely the parent. The inspectors in the Chicago schools in five months of 1900 found 670 cases of chicken pox, 55 cases of whooping cough, and 648 cases of measles attending school.

How many of these 1,373 children would have died if they had been allowed to continue in school, daily exposed to the baneful influence of the Chicago blizzards, or how many new cases would have originated from these 1,373 sources of infection circulated throughout the schools?

In addition to these often fatal diseases already alluded to, the school physicians wherever employed, have found a large number of cases of other diseases which should be guarded against, such as chorea, epilepsy, pediculosis, contagious disease of the skin and eyes, with occasionally a case of syphilis or tuberculosis in both teacher and pupil. The inspector should visit the schools once a day, preferably between 9 and 10 a. m., when any child, manifesting any departure from its normal condition, should be referred to him by the teacher. If the child is found to be suffering from a non-infectious disease and too ill to remain in school, it should be sent home with a note to the parents, suggesting that they place the child in the care of their family physician. If the disease is contagious the parents and the health officers should both be notified of the fact. In case of suspected diphtheria a culture may be taken, but in no case should the school physician suggest any treatment but should always refer them to their regularly attending family physician for treatment.

Systematic school inspection was begun in Boston in 1894, in Chicago in 1895, in New York in 1897, in Philadelphia in 1898, since which time the good work has been tried in Cleveland, Milwaukee, Minneapolis, Jersey City, Newark, Salt Lake City, and certain smaller cities as Springfield, Brookline, and Newton, Mass., and wherever tried the tabulated results more than justify its continuance. In some cities the inspectors give all their time to the work and are paid a salary, in others most of the work is voluntary. In all, the money saved by the lessened number of cases, together with the oftimes expensive quarantine (and undertakers' bills in fatalities) more than pay the cost of the school physician, to say nothing of the physical suffering and loss of life thereby avoided. The chief objection to school inspection is the expense. In this city, for example, with its 64 schools, a chief inspector with 60 assistants in the several school districts would cost probably $10,000 or $12,000 per year, which would amount to less than 1/25 of 1 mill on $308,598,510 assessed valuation.

The total cost of our city schools last year was about $4.00 per month per pupil. The cost of school inspection on the plan suggested would be about 4 cents per month per pupil.

This comparatively small expense should not prevent our city from properly caring for the lives and health of our 30,000 school children. It should not prevent other towns in the state from taking like action. It appears to me that the medical profession should in some way impress upon the school authorities of all cities and the smaller towns and country districts as well, the importance of more carefully guarding the health of the 16,000,000 school children of our land.

DISCUSSION.

Dr. G. H. Cattermole: This is too important a subject to be passed over as lightly as it usually is. The health of the school children is one of the most important subjects with which the physician in general practice has to deal.

The doctor has mentioned voluntary inspectors and the appointment of men who will serve for small compensation. We have tried those things in the smaller towns. In Boulder, two years ago, we succeeded in getting city ordinance which required all children to report to the health officer if they had been ut of school for one day. The reason for hat was the prevalence of contagious diseases and their spread in school. We found that where all children were required to visit the health officer it reduced the prevalence of scarlet fever very much.

But the trouble is, the next year the appointment is made politically, and a man gets in who cares nothing about the welfare of the children, but more for the little salary that goes with it. The incompetent man defeats the ends of the ordinance. Again, voluntary work is not appreciated by the people. They think that the man has some object.

Measles and whooping cough he mentions as being such a frequent cause of death—there and in this city they are not quarantined. As soon as the child has gotten over the eruptive stage of measles he is allowed to return to school and is still a source of danger. And with whooping cough they attend while they are still whooping, disturbing the other children and spreading the contagion. It is not so much the death among children in school, or at school ages, as it is that these children who attend school contract the disease there, carry it home to the younger ones in the household, and they die; for it is among those of younger ages that great mortality prevails.

Dr. J. T. Melvin: This suggestive paper by Dr. Byles should result in something of practical action so far as possible by every member of the society. Dr. Jackson presented before us in previous years suggestions along the same lines, and the propositions which are advanced are self-evident. They are of such vital value and interest to every citizen, to every parent, to every person in every school district throughout the entire United States that it certainly seems as if concerted action from some point is called for. This matter has been agitated, discussed for many years past; and as Dr. Byles in his paper has presented to us a resumé of what has been accomplished, we find that these forward steps have been made most largely in centers of population, like the very largest of our cities. While undoubtedly this matter of school inspection is of greater interest in these thickly populated centers where contagion has a better opportunity to spread, still there is no community, there is no school district, where this is not of prime importance.

If we can devise some method whereby it will become the fixed policy of the state to protect its young people from contagion, from the effects of their own carelessness and their own ignorance, we will have accomplished more as a medical profession than we can in almost any other one way. Now as a practical step along that line I wish to repeat the suggestion which I made at this meeting on a former occasion, and that is: That as physicians, in the normal institute we have the power and the opportunity to reach the mainspring of our children's instruction. Teachers, as a rule, have a spirit which will kindly take to every suggestion which is made which will give them the opportunity of assisting in all matters of this kind, and if the matter is presented to them so that they themselves realize the dangers, so that they themselves can impress upon the pupils in turn the importance of these questions, we will have taken a great step forward; and I know from my own experience that every teachers' institute is glad of and welcomes the help of the professional men along this line. There are no more interested bodies of listeners anywhere that a physician has an occasion to discuss these questions with, than in the normal institute.

Further than that, the suggestion which Dr. Van Meter made in his report regarding legislation in this state might well have embodied suggestions regarding the increasing of the health officers' authority. Every town in the state has its health officer, and personally I have several times usurped the power of school inspector by virtue of my power as town and county health officer. In cases of threatened epidemic, more especially if it were diphtheria I have insisted on regular school inspection of the throats of every child there was in the school,and did it as a part of my duties as town health officer. Now the law in regard to the town health officer, and the town board of health, and the county board of health, and the state board of health, is in a most chaotic condition.

It is a disgrace to the medical profession that we have no more authoritative declaration and no more definite powers granted to us. But I have found in my own community that there was no objection to my usurping certain powers in that line in the face of an epidemic. But beyond the emergency there is, as Dr. Byles has suggested, a certain necessity for the inspection of school children, especially in regard to their eyes and their hearing; otherwise they cannot do good work. And in accordance with the suggestion made by Dr. Cattermole, I say it is a disgrace to the medical profession and a disgrace to the authorities of our state that we have permitted whooping cough to pass without any regulations whatsoever. The most heartrending deaths which have occurred in my practice have been those of infants who have died from being infected by children who have brought the disease directly from the school room.

Dr. S. D. Van Meter: Dr. Melvin's allusion to the omission in my report as to amending the present public health law is a good one; and I wish to state that I intended to put in a paragraph along the line that he has suggested, but the omission was purely an oversight. The one particular point that has attracted my attention as to the defect of that law is the fact that the State Board of Health has no authority to demand of the attending physician who signs a death certificate or a quarantine certificate that he be a licentiate in this state.

I do not know that there are any members of the state board of health at present, but if there are they will remember that I agitated the subject of their accepting the death certificates of osteopaths, and all the irregulars some three or four months ago; and attempted to argue the point that while there were no specific provisions in the statute for them to refuse a death certificate or a quarantine certificate from any one who was not a licentiate in medicine in this state, they should make such a regulation on the ground that they had as much right to adopt such provision as to who should sign the death certificate, as they had to say whether it should be signed in duplicate or triplicate.

This question was taken to the attorney general's office by the secretary, Dr. Cooper, and it was handed down as an opinion from that office that the law was defective on that point, and they had no right to refuse a death certificate, even though the signer was an osteopath, or some one not a licentiate of the state.

This, to my mind, makes the record and the statistics of the State Board of Health of Colorado absolutely worthless, because we know many physicians who are licentiates sign death certificates that are rather peculiar when it comes to tabulate them as to the real cause of death. I suggest that some action be taken along this line to the end that the law be corrected or amended so that no one can sign a death certificate in this state but a licentiate in medicine.

Dr. E. Jackson: My experience is the same as Dr. Melvin's in regard to the readiness of teachers to consider all subjects of school hygiene. I have always found them so either in teachers' institutes or as individual teachers in schools. The teachers in the schools are probably much more alive to the importance of school hygiene than any other class of the community, even including the medical profession. I do not think the medical profession is nearly as wide awake as they. The obstacles, the difficulties are outside of the school room. They are in the school authorities. But the school authorities could be waked up, if the community at large could be made to make the school authorities consider the matter.

Right over there (pointing to the East Denver High School) is one of the finest high school buildings in this country. Every window in that building is furnished with the very worst possible blinds that were ever devised for the eyes of the children. They are arranged in sections, and to make it possible to ventilate the rooms those blinds must be kept pushed up towards the upper part of the window, where they exclude practically all the light, or the greater part of the light that would be of value over the larger part of the room, and leave the light coming in where it will shine most in the eyes of the pupils. The attention of the school authorities has been called to that state of affairs by the teachers year after year, and attention was called to it by the Committee of the County Medical Society that suggested the testing of the sight and hearing of the pupils in the public schools

But you can see from here those blinds in the windows raised from the bottom, admitting light there, and all the light excluded from the upper part except that there are cracks there which make it more unpleasant and disagreeable to the children's eyes than working in comparative darkness would otherwise be.

Another instance: Last year we had a couple of papers on the sight and hearing of school children read before the State Society. The State Board of Health was interested in the matter and appointed a committee, who had a scheme drawn up, and everything prepared to send to every school district in the state, the tests for sight and hearing, including the test cards and how the test should be applied. But the state administration, which is said to have spent some four millions or more dollars, hadn't forty or fifty dollars to put into printing and distributing these tests, so that the matter stays just where it was.

The teachers, I am convinced, throughout the state are ready to take up this or anything else of the kind that is brought to their attention. But the difficulty lies outside of the schools, and nothing except continued agitation in public, reading of papers here and bringing the matter before meetings and assemblies of laymen, will bring us any nearer to the goal.

Dr. Byles: I have nothing further to say, except that so far as I can learn from my investigation, voluntary inspection is not to be depended on. It may be entered into in some places by the enthusiasm of the medical profession, but as a general thing the result is not what we desire. But if this inspection is to be done as it ought to be done, it will have to be done by competent people and paid for. As Dr. Jackson suggests, the public has first got to see the necessity of it. I do not think either that we can depend upon the teachers to personally do it without special instruction. Dr. Jackson is probably a better judge of that than I am, but I hardly think the average school teacher would be capable of testing the eyes as they should be tested without special instruction to some extent, at least, in that line.

MANAGEMENT OF CATARACT.

By Melville Black, M. D., Denver.

This is a subject that has received more attention than almost any other in ophthalmology, yet the last word is not spoken, nor ever will be.

WHEN SHALL WE OPERATE?

There is a growing tendency to operate early, i. e., before the lens is so opaque as to prevent the patient from counting fingers, and in case both lenses are equally far advanced, to operate on one lens before the vision is so reduced that the patient can not see to get about alone. I favor early operation in senile cataract whenever the vision is lowered to a point at which in a short time the patient will be helpless. Usually cataract, while involving both lenses, advances more rapidly in one eye than in the other. This generally makes it possible to extract one lens at maturity while the patient still has good vision in the fellow eye. Now as soon as visual failure in the unoperated eye warrants, the refraction of the aphakic eye can be corrected by the use of proper lenses and the patient goes right on with his work with only the loss of time required for the operation and the after treatment. When both lenses are equally cataractous, and are advancing together, if we wait until visual form perception is lost before operating, we may doom the patient to inactivity for months, for years, or forever. Many lenses never become opaque, but are of an amber color and translucent. The patient may always have a small amount of vision, but not sufficient to be of much use. When we remember that as age advances the lens hardens until at the age of 55 or 60 years it is so hard that its shape is permanent, and that it no longer responds to the efforts of accommodation, we can understand how an opacity of the lens would cause it to be still harder and capable of holding well-together during extraction. If it does not come away clean, irrigation of the capsular space with normal salt solution will remove all the remnants that have been left behind. *I think we can safely say that we have advanced to a point where no cataract patient need be doomed to a period of blindness before the eyes are ready for operation.*

SPICULAR CATARACT.

We have a form of spicular cataract in which radiating streaks of opacity run from the lens periphery toward its center, and are usually found in the outer layers of the lens. This form of cataract is very slow in forming and may never cause much inconvenience. I have several cases that I have watched for years, some as long as 14 years, that have about the same vision to-day as when I first saw them. *Such cases should not be told that they have a cataract forming.* The dread of an operation hangs over them like a pall. The actual state of affairs can be explained to some member of the family or the patient told that a lenticular opacity exists. The latter term will not scare them as would the term *cataract*. We can not ignore spicular cataract, because they sometimes demand operation. These spicular opacities are subject to variations, and at times patients afflicted with this form of lenticular opacity will see worse than at other times.

"ABSORPTION CURES."

Spicular cataract is very common, and is largely responsible for the fake "absorption cures." Owing to the variableness of vision it is easy to understand how a seeming visual improvement could take place during the use of an "absorption cure." The fact that many of such cataracts never come to operation explains how many people think that the use of an "absorption cure" prevented their cataracts from even growing worse. Ophthalmologists are to blame for this, because some of them tell patients with spicular opacities that they have cataract. Hence it is necessary for us to properly classify our cataracts, and to call only such *cataracts* as give evidence of marked progression. I should advise strongly against physicians recommending "absorption cures," or even countenancing them. I mean by "countenancing," permitting their patients to use them without a protest The physician sometimes feels that if the "cure" does no good it will still do no harm. As a matter of fact we are beginning to think that these so-called "cures" are capable of harm; that their use leads to liquefaction of the lens and anterior segment of the vitreous. Such an eye will present the most difficult features to overcome during extraction, and if the eye is not lost the success of the operation will be interfered with and a slow healing will surely follow.

RECORDS OF THE OCULAR INTERIOR.

In all cases of lens opacity an endeavor should be made to determine the state of the vitreous, retina, optic nerve and choroid. When the lenses permit of a clear view of these structures, in one eye or both, a note should be made of their condition on the patient's record. As it may be years before the case comes for operation, such records will be of great value, not only from a prognostic standpoint, but because it may have been found at the aforesaid examination that there were fundus changes of such a nature that the extraction of the lens is not warranted.

PREPARATION OF THE EYE.

The preparation of the eye previous to the operation is best begun the day before, by gentle scrubbing of the eyelids and face with soap. Special care should be taken to cleanse the eyelashes as thoroughly as possible. After this Dr. White's method is most valuable, which consists in filling the conjunctival sac with 1 to 3000 bichloride vaseline, and smearing the salve thickly over the closed lids and the adjacent parts. Over this a dressing is placed, which is not removed until the patient is on the operating table.

I shall not attempt to deal with the technique of a cataract extraction. No one should attempt such a delicate operation until he has seen it performed many times, and has himself performed the operation upon the cadaver until the various steps of it can be easily carried out.

CONTROL OF PATIENTS.

It is my custom to endeavor to allay all nervousness and fear on the part of the patient by beginning to talk to him as soon as the first instillation of cocaine into the eye is made. Assurances are given that no pain will be felt, and this assurance is verified by demonstrating to him a little later that the cocaine has made the eye insensitive. The patient is practiced in looking in different directions at command, and is cautioned not to carry out the command until he is sure he is going to move the eye in the manner directed. This constant watchfulness on the part of the patient to carry out his part to the best of his ability causes him to forget his fear and to be much more tractable. After the operation I endeavor to keep the patient comfortable. Absolute rest and repose is desired. If the patient becomes tired and restless, and therefore can not remain quiet, it is often because he is restricted too much to one position. Can you conceive it to be restful to be placed on your back and told not to move? My patients are carried from the operating room to their beds, and are instructed to assume a position that is restful, on their backs or on the opposite side from the eye operated upon. When these positions become tiresome the patient is carefully moved up into a sitting position in bed and supported by a comfortable back rest, or is moved out of bed into an easy chair. When this becomes tiresome they are again placed in a comfortable position in bed. I even allow some very restless, nervous patients, to walk carefully about the room while being guided by an attendant. This is only found necessary after the other positions mentioned have become uncomfortable.

I never worry elderly patients by prescribing laxatives because their bowels have not moved during the first 24 or 48 hours after the operation. See that the bowels have moved the day of the operation, when, with the light diet they are given, it is not necessary to forcibly move the bowels for several days.

As regards diet, almost anything nourishing that does not cause too much effort at mastication can be given for the first few days. Efforts at mastication cause so much movement of the facial muscles that the dressing on the eye is moved and may cause sudden evacuation of the anterior chamber with prolapse of the iris.

I remove the dressings from the eye the morning following the operation, cleansing the lids carefully with salt solution or 1 to 5000 bichloride, and replacing the dressings. I do not attempt to look at the eye or the wound unless the patient has had pain, or symptoms that lead me to think that there has been a prolapse of the iris. The eye is dressed every 24 hours thereafter and the wound examined at each dressing to see if there are any evidences of suppuration. If all goes well the unoperated eye may be exposed, and the patient allowed to use it while eating on the fourth day. From this on he is gradually allowed to use it more and more. About the sixth or seventh day, the dressings are removed from the operated eye, and he is given a pair of colored glasses. It is well to replace the protective shield, that has been worn over the dressings, whenever he lies down for sleep. This shield is a very valuable protection, and it should be worn continuously over the dressings from the time of the operation until the dressings are removed, and from this time on it should be worn at night until the wound is soundly healed. The wound is in this way protected against any accidental movements of the patient's hands.

I am opposed to the use of atropine during the first 48 hours unless there are evidences of iritis. It is very difficult to introduce a drop of anything into the eye at the first or second dressing without the patient's making a sudden movement of the eyelids, and this movement may open the wound. I am equally opposed to washing the conjunctival sac for the same reasons ,and also because I believe more infectious material is introduced by such measures than is removed. Nature's own secretion is better than any fluid we can introduce. Wipe carefully any secretion from the lid margins and lashes. If this is not done at every dressing the lashes will become matted together with secretion, and not only do they become difficult to cleanse but they afford a favorable source for infection.

THE DRESSINGS.

It is my custom to fill the eye and cover the closed lids and adjacent parts with Dr. White's bichloride vaseline. Over this is laid one thickness of plain gauze that is cut oval in shape 2x2½ inches in size. Over this is placed a piece of cotton of the same shape and size as the piece of gauze. The thickness of the cotton will depend upon the depth of the eye from the bridge of the nose. A similar piece of cotton is placed over the fellow eye. These dressings are held in position by strips of adhesive plaster. Over all this is placed a Ring's shield. This shield I will pass around for inspection. You will observe that it is light and yet very strong, and that it will stay in position on the face. It would require a very strong blow upon it to cause injury to the eye underneath it. When it is desirable to expose the unoperated eye, I cut a hole through the shield on that side. I continue this form of dressing as long as the eye is dressed, except that the bichloride vaseline is not again introduced into the conjunctival sac, but is used on the closed eyelids.

My time before you will not permit of my dealing with the management of the many complications that may arise. It is my intention to deal with this subject in another paper at some future time.

THE SECONDARY OPERATION.

The secondary operation for clearing the pupillary space of the opaque capsule or membrane should be undertaken as soon as the opacity is dense enough to warrant it. If it is delayed too long the membrane contracts and becomes very hard to cut through, dragging upon the ciliary body results from the pressure of the knife, and cyclitis and increased tension are liable to follow. The precaution should also be taken not to plunge the knife needle very far into the vitreous, as the vitreous becomes mixed with the aqueous in the anterior chamber and the fluid then contains so much albumen that the excretory canal will not carry it away freely, and an acute attack of glaucoma may result. This accident occurred in a case I operated several years ago and it proved a valuable lesson.

DISCUSSION.

Dr. Boyd: I favor early operation in cataract. But, unlike Dr. Black, I do not believe in his preliminary preparation, or any form of preparation of the patient the day before, except a mild catharsis or something of that kind. Just prior to operation great care is to be exercised in regard to thoroughly cleaning the ciliary margin. I do not believe in the use of any special antiseptic.

COLOPEXY OF THE SIGMOID FLEXURE FOR PROLAPSE OF THE RECTUM.

By Albert L. Bennett, M. D., Denver.

Prolapse of the rectum is a falling down or descent of a portion of healthy bowel. It is most common in young children or advanced adult life. Special conditions are necessary to loosen and cause prolapse of the rectum from the surrounding tissues with which it is most intimately connected.

Etiology: The factors favoring prolapse of the rectum are a general run down condition, especially in young children and the aged, constipation causing straining at stool, lack of tone or relaxation of the sphincter, senile changes of the lavator ani, rectal sphincters and retractors. Any disease or condition causing muscular spasms, as the severe tenesmus of tropical dysentery, fissure, calculus, urethral stricture, phimosis and enlarged prostate may cause it. Trauma and permanent weakening of the sphincters due to spinal lesions are also factors. In women we must add to this list pregnancy and parturition and relaxation of the muscles comprising the pelvic floor, from continuous over distention.

It is only necessary to divide prolapse of the rectum into two varieties, partial and complete. In partial prolapse there is involvement of the mucous membrane only, and the extent of the prolapse is limited. In the complete form the bowel may prolapse to any length, carrying with it the peritoneal fold of Douglas, or even forming a rectal hernia containing intestines, ovaries or even the bladder.

Diagnosis: This is not difficult, especially when the prolapse is well down. The smooth surface and softness on palpation, with absence of any pedicle, differentiate it from a polypus; the smooth surface, and red membrane present an entirely different picture from the dark, bluish, grape-like arrangement of piles.

Treatment: Extreme care and gentleness should be observed in manipulation; to tear the bowel is not difficult. After reduction the patient should not be allowed to empty the bowels while in the erect position, but should be lying on the side. In children and the aged, especially in the latter, compression of the nates with a wide strip of adhesive plaster directly after a bowel movement, will usually prevent descent of the bowel. In children care of the bowels and faithful use of the adhesive strip after a movement for three or four months will often result in cure.

Many patients with prolapse of the rectum seem to get along fairly well, and when the prolapse can be reduced without much pain and with freedom from hemorrhage, I do not believe operative interference is justified. In the cases in which the prolapse bleeds freely on handling, is badly inflamed and reduced only with difficulty, surgical interference is not only warranted, but necessary. Even after a thorough and careful operation the surgeon is rash indeed who permits his patient to believe that all danger of relapse is past.

Various surgical procedures have been practiced for the cure of this distressing condition. Wedge-shaped portions of the prolapse have been removed by scissors or cautery, and portions have been removed by ligature. Efforts have been made to bind the muscular and mucous coats more firmly together by exciting inflammation, a dull red cautery being passed about three inches into the rectum and drawn along the bowel in its long axis to the anus. Usually four or five lines are burnt. The bowels are then usually controlled with the opium pill for about five days and pressure made with the nates toward the anus to prevent prolapse during the first movement.

The operation of Verneuil known as Rectopexy, or Proctopexy, secures the prolapse by suturing the rectum back to its posterior bed. Bryant's method, known as Colopexy, consists in elevating some portion of the colon and attaching it to the abdominal wall by suturing.

I will now report briefly three cases I have operated in the last two years for complete prolapse of the rectum. In each case I operated according to the method of Bryant, doing a Colopexy of the sigmoid flexure of the colon to the anterolateral abdominal wall.

Case I. I. B. Aet. 48. Occupation, engineer. Came under my care in November, 1902, having a prolapsus as large as a good sized orange, coming down with every bowel movement, remaining down several hours at a time, and never reducing unless the patient was lying down.

He had been operated once before in Kansas by the method of clamp and cautery. During the six months previous to consulting me he had lost strength steadily, and stated that the continuous bleeding was "sapping his life away." Operation advised and accepted.

November 21, 1902, under chloroform anesthesia, changed later to ether, Colopexy by Bryant's method was performed. An incision parallel with and one inch above the anterior portion of Poupart's ligament was carried down to and through the peritoneum. The abdominal cavity being opened, two flaps of peritoneum were formed by separating the parietal peritoneum from the edges of the abdominal wound, almost one inch on each side. The colon was then pulled well down (as advised by Bryant), to take up any laxity, and the rectum pulled well up, completely reducing the prolapse. Sutures were then passed securing the peritoneal flaps to the serous and muscular coats of the rectum. Five black silk sutures were then passed as follows: Inward through the entire thickness of the upper abdominal wound—on through the parietal flap of the same side—next through both serous and muscular coats of intestine, the sutures passing *behind the longitudinal band*—then from within the sutures passed outward through the peritoneal flap of the opposite side, then through the entire thickness of the lower, or opposite, side of the abdominal wound.

Tying these sutures firmly brought the longitudinal band and a portion of the wall of the intestine into close contact with the abdominal wall—and so approximating the borders of the wound that they grasped the longitudinal band and portions of the internal wall—at the same time closing the abdominal wound. This is the typical operation of Bryant. The bowels were controlled by opium given in the form of one grain pills, repeated often enough to keep the patient under its influence. Bowels were moved on the fifth day. This patient did well, caused very little trouble during the post-operative care, returned to his work and has had no relapse since operation, covering a period of nearly two years.

Case No. II. Mrs. S. Aet. 45. Had suffered from prolapse over eight years. The prolapse first appeared after a difficult labor, with bad lateral tears of the perineum left unrepaired. I operated this case in precisely the same manner as the first case, doing in addition a perineorrhaphy (Emmett's) to restore the integrity of the pelvic floor. This woman is in good health and working without any sign of relapse, fourteen months after operation.

Case No. III is of especial interest, owing to the past history and age of the patient.

Mrs. M. Aet. 56. Residence, Denver. Occupation, housewife. Suffered from complete prolapse of rectum nearly seven years. This patient certainly deserved much sympathy, being very deaf, and having a sick husband to care for. She had been operated on three times for cure of the prolapse, each operation leaving her in worse condition. This poor old lady could not sit down with any degree of comfort, control of the bowels was entirely lost, and she dreaded to go outside the house. She felt that death alone would end her sufferings, and considering all she had been through, it was remarkable that she had the courage to submit to a fourth operation.

She came under my care in October, 1903. Examination revealed a poorly nourished person, having a pear-shaped prolapsus 10 centimetres in length and 28 centimetres in circumference. The outside surface of the tumor was highly inflamed and bled freely on palpation. On October 30, 1903, at St. Anthony's Hospital, I opened the abdomen and reduced the prolapse, securing it by Bryant's method of suturing the sigmoid. Considerable laxity of the colon existed, and was taken up with sutures.

This poor old woman had a history of three previous operations, all failures; so realizing what this fourth operation meant to her, I decided after completing the colopexy and closing the abdomen, to reinforce the work done by a rectopexy. This was done, the rectum being sutured to its posterior bed according to the method of Vernuil. Despite her age and all she had passed through, this patient did surprisingly well and left the hospital four weeks after operation. The photograph shows the condition previous to operation fairly well. This patient has had no relapse whatever, eleven months after operation, and having kindly consented to be present to-day, I think you will be able to judge by her well nourished, healthy condition that she is much improved.

The happy result obtained in these three cases, especially the last one reported, encourages me to believe that in bad chronic cases of complete prolapse of the rectum, the operation of colopexy of the sigmoid flexure is the ideal method of affording relief.

*MELANOTIC SARCOMA OF THE LIVER AND OTHER VISCERA. REPORT OF A CASE.**

By Crum Epler, M. D., Pueblo.

E. G. Female. Aged 50 years, unmarried, transient in Colorado, seeking health. Was a total stranger to the doctor, had never been seen by him until he was called to attend her. The patient was suddenly taken ill in her apartments in a hotel. The matron thought she had fainted, and sent for the doctor in great haste.

The condition of the patient when the doctor arrived was as follows: Unconscious, in complete prostration, covered with a cold clammy perspiration, pupils dilated, abdominal muscles rigid and tense, the radial pulse almost indistinguishable, and what was thought to be at the time a complete cyanosis existing.

After giving cardiac restoratives, applying heat to the extremities and abdomen, and raising the foot of the bed, the patient revived into a state of semi-consciousness. She could not give any history worthy of mention, save her name, and that she had been ill for about two years. Even after she had revived sufficiently to give the above information the cyanosis still continued to such a degree that the patient was purple. It was impossible to learn if she were subject to such attacks or not. Headache was very severe and continued as long as the patient was in any stage of consciousness.

A nurse was immediately called. This was Tuesday afternoon. About midnight of this day the patient seemed a little brighter. The nurse called my attention to the fact that the patient had not passed any urine up to Wednesday morning. Upon catheterization but one ounce of urine was obtained. The urine, so far as consistency and color were concerned, resembled Armour's Vigoral. Specific gravity 1027; reaction neutral; no sugar; some albumen; it was stable, did not seem to change in any respect after setting in an open flask for several days. Microscopical examination showed pigment, an occasional fragment of a red blood corpuscle, a few granular tube casts, and bacteria. Chemical tests showed the absence of bile; acid and heat would both readily coagulate it. The color never changed, the quantity gradually grew less until there was a complete suppression about six hours before death.

Physical examination revealed but little beyond the fact that the liver was small and contracted. The tongue was entirely clean and so remained up to the last. Thirty hours after the first attack the patient began developing a decided tympanites over the entire abdomen, gradually becoming more and more distended, and died Thursday at midnight.

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*Read before the Pueblo County Medical Society.

The diagnosis was sustained by the facts revealed in the post mortem, as follows:

Upon opening the abdomen the first thing noticeable was the escape of a dark walnut-colored fluid, limited in quantity. The next was that the omentum was adherent to the viscera, and that there was no part of it that could be raised from its firm and unnatural attachment. The entire mass of viscera was matted together firmly, and when removed was not larger than a half gallon measure, showing that there had been inflammation of the peritoneum before this attack. The entire mass of viscera was of a dark color, and studded all over the surface of the omentum were small vesicles which contained this same dark fluid.

Examination of the liver showed its free margin to be contracted, while its upper surface was more convex than normal. Its weight was normal, its color dark, almost black, except one spot on the upper surface covering about eight square inches, which was normal. Its consistency was that of half dried putty, being very friable and easily broken.

The gall bladder was elongated to the extent of about five inches, and contained nothing except this same dark fluid just spoken of. There was nothing peculiar about the spleen, except that it, too, was very dark in color. The pancreas was apparently normal. The kidneys were enlarged, very firm, unusually dark and distorted in shape. A longitudinal section showed the pyramids exceedingly plain, they, too, being very dark in color. Microscopical examination of the liver and kidney showed a pathological mesh-work filled with pigment cells of a dark brown or yellowish color, many of which had already disintegrated.

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*SARCOMATA OF THE BACK.— CASES AND COMMENTS.**

By Charles A. Powers, M. D., Denver.

Five cases of sarcoma of the back which have come under my care during the past few years teach the important lesson that any wart or mole or other small growth should be removed at the first sign of beginning irritation; and I am inclined to agree with the position taken by Dr. Keen, who said at the meeting of the American Medical Association last June, that all warts and moles should, unless there be some contra-indication, be removed lest they become malignant.

The first of these cases concerns a school master fifty years of age who was referred to me November 22, 1895, by Dr. Bonney. This man had had from birth a small pigmented mole over the second lumbar vertebra. About three months before Dr. Bonney saw him, this mole began slightly to enlarge and developed a little watery blister. The physician of the gentleman, in Massachusetts, opened the blister. The little mole continued to grow and when the man was seen by Dr. Bonney and by me, it was about the size of a cherry, quite black and a little irritated. I made a provisional diagnosis of melano-sarcoma, took the man to the hospital, gave him an anesthetic, removed the growth in fairly wide limits and gave it to Dr. Crouch, who had his microscope in the operating room. In a few minutes Dr. Crouch reported the growth to be melano-sarcoma, whereupon we removed an enormous area. The growth was the size of a cherry, the eliptical incision was at least eight inches long, it extended widely on the flanks, down to the spines of the vertebrae, took away the tips of the vertebrae, and the intervertebral ligaments. I had never seen a man long survive a melano-sarcoma, and I was determined to give this patient the very best chance I could.

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*From stenographer's notes.

An unfavorable prognosis was made. This case was reported a month or so after operation, in the journal at that time edited by Dr. Axtell. The man continued under observation. He was seen every three or four months. He developed nothing in the scar, but at the end of two years he came back with a mass the size of an orange in the right axilla. That was excised. It was melano-sarcoma. Within a month or two he developed lumps on the scalp and face, and within two and a half years from the time we first saw him he died of general melano-sarcomatosis.

The second case which I will report concerns a patient whom I saw March 12, 1900, with the late Dr. Parkhill and Dr. J. M. Walker, the family physician of the patient. This was a woman of about forty years, who, when seen by us, had a fixed, hard growth, the size of a grape fruit, in each axilla. It was fused with the vessels, and evidently with the nerves on each side, causing her much pain in the arms and forearms. On going over the patient's body I found a small scar about an inch long over the tenth or eleventh dorsal vertebra. I asked what the scar meant and was told that a year and a half before a physician in an adjoining state had removed a small wart. The husband said it was put in a little bottle of alcohol and he thought that he still had it. We got it and gave it to Dr. Wilder, the pathologist, who reported it to be an alveolar sarcoma. The diagnosis of the axillary lumps was plain then, they were sarcomata. A palliative operation was done by Dr. Parkhill, but the woman died within a month after the time we saw her. Here was a case in which a woman had had from childhood a little wart. It got irritated, was take out under cocaine, proved to be an alveolar sarcoma, and within a couple of years the patient was dead.

The third case concerns a woman of 45 years, whom I saw in April, 1900, with Dr. Lippincott, Colonel U. S. A., who at that time was in charge of the army medical department here. The woman was the wife of an army officer in Arizona. She had had a small mole in the midline of the back in the upper lumbar region, from earliest recollection. It had begun to grow and about three months before I saw her the post surgeon had taken it out in what were thought to be wide limits. He had sent it to Dr. L. A. Conner, pathologist to the New York Hospital, who had reported it to be a myxo-fibro-sarcoma. It had recurred and when I saw her there was a lump about the size of a large olive. This was taken out in very wide limits, an enormous eliptical incision was made down to and including the spines of the vertebrae. That woman has remained well. It is now something over four years. I heard from her three or four months ago. She was living in the Philippines, and she said that her surgeon there, the army surgeon, examined her at about that time and reported that he could find no recurrence. This woman, then, is well after more than four years.

The next case, the fourth, concerns a man of 35 whom I saw with Dr. Bonney, February 24, of this year. This man said that he had had for several years a small lump about the size of half a cherry, a little to the right of the mid-line in the median dorsal region. This had been taken out at his home in Indiana and examined by a lay pathologist. The man who examined the tumor was not a physician, but he was the biologist at the University in the town in which the man lived. This biologist had made a microscopic examination and reported the growth to be benign. When Dr. Bonney and I saw him there was a relapse. There was a growth about the size of an olive, a little to one side of the original scar. A diagnosis of sarcoma was made. The growth was removed in the widest possible limits, and given to Dr. Wilder, who reported it a myxo-fibro-sarcoma. I thought at the time that the outlook for this man was not good. I operated on him February 24 of this year. I saw him the latter part of April, and he had no relapse. But while I was east he came to my office with a recurrent lump. Dr. Childs removed this, the second relapse which the man had had. I am sure that the prognosis in this case is bad.

The last case is that of this gentleman, whom I show you. Patient shown came to me the first of August, 1902, a little over two years ago. He had a large growth on the upper part of the back, which had been increasing in size pretty steadily for a year, and the extent of which is pretty well shown in these two photographs. It was an enormous growth. It started at the neck, went beyond the mid-line, curved down below the spine of the scapula, forward on the shoulder and pretty well forward toward the anterior region of the neck. A clinical diagnosis of sarcoma was made. The growth seemed a very formidable one, I am sure that it seemed to me as formidable as any which I have attempted to remove. But the only hope seemed to lie in operation. He was operated upon at St. Luke's Hospital, three or four days afterwards, during the first week in August two years ago, and a very wide excision of the growth made. I should think that the area taken out was as large as a dinner plate. We took away the supra-spinatus, the infra-spinatus, trapezius and a wide area of adjoining skin. Then this enormous hole which was left was pursed up with a big purse-string suture, and skin grafts applied.

The man nearly died on the table from hemorrhage, which was tremendous. The growth was fed by very large vessels. He got off the table with something of a pulse, but he very nearly died during the first twenty-four hours. He was given copious infusions of salt solution and rather to my surprise and very much to my gratification he pulled through. The skin grafts caught very well indeed and the result is shown here. A few months after this operation I showed the patient before the meeting of the Clinical and Pathological society, and I am very glad to show him to you, because you see the result something over two years after the operation. This scar does not represent the size of the growth, the size of the area removed, because the whole thing was pursed up by a heavy purse-string suture.

I have watched very carefully a little bit of a nodule at the upper part of the scar but I have not convinced myself that it is anything more than fibroid tissue which has been there now for something over a year, and it has grown smaller in the last six months. I do not think that it indicates a relapse.

I should add that this man was given the X-rays by Dr. Childs—32 treatments. He has very good use of his limb, and while it is only two years since operation, I think that he has a pretty good chance of freedom from relapse. We know that most relapses in sarcoma come during the first one or two years.

Of these five cases two are dead; one, the one operated in February, has, I think, a very unfavorable prognosis; the other two have a very good prognosis. The lesson which comes to me is that we should watch for these little growths, these seemingly innocent growths, and remove them early. Pigmented moles should always be removed.

DISCUSSION.

Dr. Finney: The report has been a very interesting one. It recalls to my mind a case which bears out the idea in regard to the importance of the removal of these small pigmented growths. Just above his elbow on the right arm, which had been present, he stated, as long as he could remember, but which had recently become irritated, he thought, from some clothing which he had worn. I removed this growth as I thought quite widely and deeply, taking in the surrounding tissues, and as it had that appearance of pigmentation which was suspicious I sent it to the pathologist of the Santa Fe Company at Topeka. He reported it as a melano-sarcoma. The subsequent history proved the truth of his report. The man had a recurrence in the axillary region within a year. The growth was removed by me, and within six months after this removal the patient had a recurrence practically all over his body, and especially the trunk and the head, of melanotic lumps and died from the general infection.

As to whether we can subscribe to the position, that all growths, all moles and all warts should be removed, I have some and all warts should be removed, I have some doubt. If we did, the whole human family would be subjects for surgical operations at once. I think there are probably none of us here in this room but what have a mole or a wart on us somewhere and a good many of us have several of them. However, I think it is well enough to watch all of those things and upon the slightest indication of trouble from any of them, they should be removed. Upon the other hand, when irritation has commenced, then perhaps it is too late. It is a hard question to take sides on.

*DIPHTHERIA.**

By H. R. Bull. B. S., M. D.,
Grand Junction.

It has long been the opprobrium of the practice of general medicine that it is not an exact science, especially in the application of therapeutics. Happily the field of uncertainty is gradually becoming narrowed, and it is a genuine pleasure to the physician who delights in accurate work to meet a disease which can be diagnosed with certainty and treated upon a rational basis. The young physician of to-day can realize but lightly the alarm which a case of diphtheria caused the friends and relatives of the patient, and the worry which it caused the conscientious physician, before the bacteriology of the disease was known and antitoxin discovered. I cannot hope to bring any thing new to the members of this society pertaining to diphtheria, but it is my object to go over the ground briefly with special reference to its practical bearing on the work of the country doctor.

Bacteriology. A symptom or a collected group of symptoms should not be accepted as representing a certain disease. The laboratory and the microscope provide the means of ascertaining the remote causes which produce these symptoms. Among the germs concerned with the causation of the anginas are several which produce similar symptoms during their invasion, and cannot be differentiated by simple inspection by the most expert clinicians. Only one of these produces the deadly ptomain. This is produced with greater or less rapidity, depending upon the virulence of the bacillus which produces it, and its results upon the patient are governed by the amount of resistance of this individual to the toxin. Through long accumulated evidence we have learned that hypertrophied tonsils, adenoid growths, enlarged cervical glands, and what we may term a weakness of mucous membranes are indicative of a susceptibility to the disease diphtheria. We also know that an inflamed spot in the throat is an excellent place for the Klebs-Loeffler bacillus to grow, and that any factor which lowers the vital resistance increases the susceptibility to the disease.

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*Prepared for the meeting of the Colorado State Medical Society and read by title.

In taking up the bacteriology of diphtheria we find it necessary to consider briefly the staphylococcus and the streptococcus, because they are so frequently associated with the Klebs-Loeffler bacillus.

The staphylococcus is found in almost any healthy throat, and upon examination looks like groups of shot lying upon a flat surface. The staphylococcus occurs in two forms, the staphylococcus pyogenes aureus and the staphylococcus pyogenes albus. These are the germs most commonly found in the simple anginas. It is probable that the almost constant presence of the staphylococci renders us partially immune to staphylococcic infection; and it is observed that the anginas of this nature run a shorter and more favorable course, as a rule, than those due to streptococcus infection.

The streptococcus family is large and comprises at least 20 different forms. It is sometimes found upon the mucous surface of the mouth, nose and throat in healthy individuals, the streptococcus pyogenes aureus being found most frequently. They are spherical bodies, and instead of the shot like grouping of the staphylococci, the streptococci are arranged in chaplets, or chains, or rows. A streptococcus infection is characterized by high temperature, with pain; membrane forms, the inflammation is liable to spread up the eustachian tubes, or abscesses may complicate the case.

The Klebs-Loeffler bacillus, the infecting bacillus of diphtheria, was first discovered by Klebs in 1883, and was afterwards described by Loeffler in 1884. This belongs to the class of bacteria known as bacilli. We identify this bacillus by its shape, irregular staining and its arrangement. Its shape is rod-like, or clubbed, its length two or three times its breadth. Its irregular staining is characteristic and sometimes confusing, the rod-like bacillus sometimes taking the stain best at either end, giving a dumb bell appearance; or again the bacillus may take the stain best towards the center and give a spear-head appearance. It has been my experience that the more virulent cases are more apt to give the diamond or spear-head appearance under stain. The arrangement of the bacilli in pure culture has been compared to a school of minnows, on account of its parallel grouping. The virulence of a case may be estimated by the rapidity of the growth of the bacilli upon the culture medium.

The pseudo-bacillus seems to be a diphtheria bacillus with a low degree of virulence. I believe it is safe practice to ignore the pseudo-bacillus and to class all as true bacilli of diphtheria.

Diagnosis. The diagnosis of diphtheria is based upon the bacteriological factor and the clinical evidence. I place the bacteriology first because the clinical diagnosis is not possible in many cases seen early, yet I would not slight any clinical evidence; the methods should be used together. I take my tube of culture medium and inoculate it from a swab which has been pasesd over the inflamed area. If I am at a farm house in the country or if I happen to be out of prepared culture tubes, I take a clean ointment box or a shoe blacking box and coagulate the white of an egg in it, and use this coagulated albumen for a culture medium. Again I may take a hard boiled egg, cut off the small end and innoculate the lower cut surface; the small end is then replaced with the contents removed. I place this behind the stove or on a warm radiator, and make the culture without even any incubator. However, it is better to have an incubator. I have a simple water-jacketed incubator which I have been using during the past six years, having thermometer, lamp, etc. I find that the blood serum makes the best culture bed, the egg albumen being slower.

I desire also in this connection to call attention to the gown which I wear in attending contagious diseases, to protect clothing and avoid the necessity for subsequent changes. It is kept in an air tight tin case, and in the case is a bottle of formalin. Each time that the gown is worn a few drops of the solution is poured upon it and the lid closed. The case is carried regularly under the seat of my buggy.

In tonsillar diphtheria we have the fauces evenly reddened, with here and there isolated grayish spots tending to coalesce. These patches are adherent and cannot be wiped away without exposing a raw, bleeding surface. This membrane is usually unilateral at first and may spread on the soft palate, uvula or over the pharynx. This is progressive glandular swelling, often little fever, but great constitutional depression from early systematic toxic invasion. Membrane on the uvula, soft palate or pharynx, is nearly always diagnostic of diphtheria.

According to Holt, "a primary inflammation of the larynx attended with the formation of pseudo-membrane, beginning and ending in the larynx, is nearly always laryngeal diphtheria, which is membranous crop or true croup. A secondary inflammation of the larynx attended with the formation of pseudo-membrane and resulting from a pseudo-membranous pharyngitis is nearly always true diphtheria or secondary laryngeal diphtheria. Inflammations of the nose, tonsils, pharynx or larynx attended by the formation of pseudo-membrane, and complicating scarlet fever, measles or influenza are nearly always not true diphtheria, but are caused by staphylococci or streptococci."

Taking these conditions into careful consideration we can diagnose, according to the best authorities, about 90 per cent. of the cases by clinical methods in from 24 to 36 hours, and the remaining 10 per cent. cannot be determined on clinical grounds alone whether or not they are diphtheria. We have a variety of mixed infections which are puzzling, thus the streptococci may predominate and we may have only a comparatively small number of diphtheria bacilli in a case which presents the clinical features of follicular tonsilitis. To handle such a case on clinical evidence alone would be prejudicial to the best interests of the patient and the community. In all cases of doubt our verdict should be, isolate the patient until the diagnosis can be made definitely.

Types of diphtheria present such varied pictures that I shall mention them only in part, and only those which seem to have an important bearing on the management of case. Other things being equal the more extensive the membrane the larger the quantity of toxin produced and absorbed, thus greatly increasing the liability to serious complications and sequels. In laryngeal diphtheria the symptoms are especially important because the bacilli may not be present in the throat, and the injection of antitoxin delayed. This is particularly the case in young children, where there is no expectoration and the fauces are frequently cleansed by drinking water. We have in laryngeal cases invariably laryngitis, with stridulous respiration, sharp metallic croupy cough, often aphonia, and as the case progresses the ascessory muscles of respiration become active; and unless promptly and boldly treated by antitoxin reinforced by intubation we have deepening stupor, progressive cyanosis and a mortality of about 90 per cent.

Nasal diphtheria is next to laryngeal diphtheria in point of danger to life. It may originate as a primary nasal diphtheria but more frequently it is secondary to the pharyngeal type of the disease. I recall one case which occurred 10 years ago in my practice, of a 4-year-old girl with pharyngeal and secondary nasal diphtheria where the disease extended up the lacrimal ducts and caused a destructive keratitis which resulted in entire loss of vision in one eye from the resulting leucoma. I also recall a case in 1891 where the disease extended up the eustachian tubes and caused destruction of the membrana tympani. This case resulted fatally, involving the larynx and nasal cavities. Primary vaginal diphtheria is comparatively rare. I saw one case in the Children's Hospital in Philadelphia in 1886.

Complications and Sequels. Albuminuria is found to be present in nearly all severe cases and in many of the milder type. It seems to be an expression of the direct destructive action of the toxin upon the kidneys, as well as on account of overworking the kidneys as organs of elimination. There is rapid renal degeneration as shown by the presence of casts, renal epithelium, red and white corpuscles. This albuminuria may be transient or may last for several weeks. Post diphtheritic paralyses are the results of peripheral neuritis caused by the action of the toxin upon the nervous structures. They seldom occur until a week or two after apparent recovery.

I have in mind a family living in Green River, Utah, when Green River was a division point on the railroad. The mother was a Sairy Gamp who did not believe that diphtheria was "catching," as she expressed it. Through her influence on the community an efficient quarantine was almost an impossibility, there being no county or state health board at that time. There was a fatal case of diphtheria at Green River, and in spite of warning this woman took four of her children to the funeral and permitted them to kiss the corpse. The entire four of these children were taken with malignant diphtheria, and two of the cases proved fatal. These cases occurred in the practice of Dr. Butler, who was at that time associated with me. An older son in the same family who had not been at the funeral was a patient of mine. He contracted the disease in a mild form and made an apparent good recovery. He was warned at my last visit to remain in bed for a week, as the heart had shown some irregularity and weakness, but feeling very well I have since learned that he got up the second day after my final visit. On the seventh day after I saw him he went to a pasture to catch a colt, and upon running to head the animal into a corner, he dropped dead, undoubtedly from cardiac paralysis.

Treatment. In the treatment of diphtheria the early and thorough isolation of the patient in a room prepared by removing carpets, curtains and all superfluous furniture before it has an opportunity to become contaminated, is the first important step. To immunize exposed children in the family with 500 to 1000 units of antitoxin will confer an immunity for about a month. The sick room should have plenty of light and good ventilation. It is an excellent plan to have a sheet saturated with a strong antiseptic hanging over the doorway to the sick room. A pillow slip hanging near the bed should receive all soiled handkershiefs, towels, napkins, bed clothing, etc. This, without opening, is placed in boiling water and boiled for half an hour. It is advisable for the nurse to have an immunizing dose of antitoxin if she has any tendency to sore throat, or if any irritation of the throat develops. The specific treatment of the patient consists in the administration of antitoxin, which is employed as an antidote to neutralize the toxin then active in the system. If we could estimate the number of toxic units in the system of a given case we could then estimate the number of antitoxic units required. The antitoxin treatment will save cells from destruction, but will not revitalize a single destroyed cell. The all important consideration then is to give the antitoxin early and to give enough. There is no known limit to the maximum dose of antitoxin. and from 3000 to 5000 units should be used in even mild cases. It seems, too, that young children are more susceptible to cell destruction than older children and adults. Therefore young children should receive relatively large initial doses, and if conditions are not becoming modified in 10 or 12 hours the dose should be repeated. I need not dwell upon the necessity for surgical cleanliness in making these injections.

Next in importance to the specific treatment is the necessity for closely watching the heart, and promptly anticipating any heart weakness. The best tonic is strychnia, which may be used alone or in combination with other heart tonics, such as alcohol, digitalis, sparteine, caffeine and strophanthus. But all such remedies should be given in full, decided doses. Concentrated nourishment should be administered every three or four hours. The local treatment had better be confined to weak alkaline and antiseptic washes, and in case of young fretful children omitted entirely. In nasal diphtheria the local treatment becomes very necessary on account of the very rapid absorption of toxin.

The alimentary canal should be cleared by a suitable laxative—calomel is the best. Laryngeal diphtheria is now less frequent than before the general adoption of the antitoxin treatment, and the necessity for the operations of intubation and tracheotomy are correspondingly less frequent. When in any case of croup there is supra- and infra-clavicular depression during inspiration it is time to intubate. I have an original O'Dwyer intubation set, with the autograph of the late Dr. Joseph O'Dwyer, also an instrument which I picked up last year in New York, designed for speedy tracheotomy. This hardly looks good to a surgeon, but it has the recommendation of the Board of Health of New York City, and will do in an emergency.

Finally comes up the question of convalescent cases. How long should these convalescent children be compelled to remain indoors and in an isolated room? It seems that the trend of modern authority is to minimize the danger from the few bacilli found in the throats of these convalescents. I believe that a child should be given the benefits of fresh air and sunshine as soon as the clinical evidences of the disease disappear, but that the child should not attend school until the throat is free from bacilli.

TREATMENT OF URETHRAL STRICTURE BY ELECTROLYSIS.

By W. W. McEwen, M. D., Durango.

It is doubtless true that there is no therapeutic agent whose utility is universally conceded of which the practitioner generally knows so little as electro-therapeutic measures.

Many of our better educated physicians fail to distinguish between faradism and galvanism—think even that the galvanic current can be obtained from a faradic machine; others think that an electric current is simply electricity and that its varied effects depend wholly on polarity, and the strength of the current used.

This being true, a few prefatory words of explanation will be pardonable, and especially so since my paper is not prepared for the professional electro-therapeutist, as a treatise on stricture, nor a resume of what others may have said, but is a plain statement for the guidance of the general practitioner who may desire to adopt this successful method of treating a very troublesome ailment.

The common dust-covered faradic machine found in most physician's offices, furnishes a purely physical current, exciting muscular contraction, and has no place in any electrolytic manipulation; while the galvanic is a chemical current, capable, when properly adapted, of breaking up organic stricture, or bodies, into their primary elements. The strongest faradic machine could not heat a cautery iron or decompose a drop of water, either of which may be easily done with a galvanic current.

Galvanic batteries as ordinarily used are of two kinds, the cautery battery having large elements and but few cells, and the electrolytic galvanic battery, the one used for medical purposes (except to heat cautery irons), having a number of cells with small elements. This battery furnishes a strong current, a current with great force, called a tension current. The Mackintosh, or any one of the many good batteries, built in the manner described, will answer our purpose well. The fluid used is the common bichromate acid solution with enough mercury bisulphate added to keep the zincs bright. You should have twelve cells; the number used will vary from six to twelve, according to the sensitiveness of the patient, or the density of the tissues. Eight is the number I oftenest use. The more cells used the quicker the same amount of work can be done. The fluid should not be too strong.

I find I only require every alternate or every third sized sound as put up by instrument makers. I seldom use the insulated rigid sounds, but use and prefer the common olive tipped Otis bougie. These can be insulated down to the olive tip by slipping over the wire stem a small English gum catheter after snipping off the end; or a piece of small soft rubber tubing answers well. The stem being flexible it can be bent to any shape required.

The urethral electrode is always connected with the negative pole (zinc element) of the battery, and a sponge or carbon, first dampened in salt water, to the positive pole. This latter may be held by the patient in such a manner as will enable him to press the palm of the free hand firmly against the sponge at a given signal, or it may be placed in contact with any other part of the body.

If you have a current breaking handle, the sponge may be left in contact with the body; otherwise the patient should be instructed to make the connection only after the electrode has been introduced well up against the stricture.

I very much prefer to have the patient stand during the treatment. Select an electrode one or two sizes larger than will pass the stricture, if any one will pass, if not, then the smallest size made, one with a rather sharp olive tip if the tissues are dense. Introduce it in close contact with the stricture—do not oil but lubricate with soap and water, then make the connection as previously stated, keeping a steady, firm, but not forcible pressure. Force is contraindicated; the object is neither to dilate nor puncture, but to dissolve the stricture by the chemico-electrolytic action of the negative current. Do not expect the sound to move right along as when you are dilating. The current should not be strong enough to cause pain, an effect which requires a very strong current. The operation being painless you will be tempted to try too much at one sitting, and may leave your patient a little sore. Never use two successive sizes at one sitting, nor repeat the treatment until any soreness resulting has disappeared. Once a week will be about right.

You will soon be able to determine

whether or not too much force has been used, for if you have dilated any you will experience this amount of difficulty in introducing, at the next treatment, the sound used last, whereas if you have gone about it properly you will have no difficulty in passing the sound last used, even though weeks or months have passed since the former treatment. If the stricture is multiple, I have had good results by restoring to normal caliber at the first stricture before beginning to treat a second one; or by restoring to normal caliber the straight urethra before entering the prostatic with the curved sound.

I will recite one case, which will include about everything the surgeon will ever meet:

H. H., aged 48. Married. A stout built man, but run down at the time. Was brought to my office by Dr. L. T. S. Patient said he fell from a hay loft to the lower floor, lighting astride a ladder. This was twelve years before. For more than a year the urine had "oozed from him" involuntarily, and at this time looked more like pus than urine. Dr. S. said he and others had been unable to pass any kind of an instrument. I tried a number of filiform bougies with no better results. I began treatment with a small sound which I succeeded in passing about one-half inch. At two subsequent treatments I had this much of the canal open to normal size.

On account of a spell of typhoid fever the treatment was interrupted for six weeks, but on his return I had no difficulty in introducing the sound last used as far as before. The stricture was two inches in length. When about half way through I seemed to enter a pocket, and during one long tiresome treatment made no apparent progress. The patient lived twelve miles away, and a long spell of stormy weather prevented him from returning for four weeks. What became of the pocket I am unable to say, but we had no further trouble with it. The stricture was passed at two treatments—I mean I passed the electrode a certain distance, then with several treatments had this part restored to normal size, then at the next attempt I entered the bladder with the small instrument, and at each subsequent treatment passed a larger instrument until I passed a No. 22 sound, a size I had to slit the meatus to insert. We then began to wash out the bladder, and by the time the urethra was normal size the cystitis had disappeared.

I have recently heard from this patient and he still voids a normal sized stream.

My other cases, ranging from slight contractions requiring only a few treatments, up to this, my most difficult case, have been uniformly satisfactory.

I believe electrolysis is better treatment for all close, dense, or long strictures than either dilatation or cutting, and equal to either for slight cases.

FOR BETTER ORGANIZATION.

The following letter has been addressed to the President, Secretary and members of each of the constituent societies of the Colorado State Medical Society:

Gentlemen—Following upon the re-organization of the American Medical Association, and in compliance with the general plan, our state and county medical societies adopted the model constitution and by-laws prepared and sent out by the National Committee on Organization. Under this plan the county and district medical societies of each state became the units of organization and the State Medical Society a combination of these integral parts. The county and district societies receive their charters from the State Society and their members, without further election, become members of the State Society and eligible for the American Medical Association. Thus county and district medical societies are given an equal, vital interest in the State Medical Society, and, by delegates, a proportionate voice in its affairs and management.

It is clear, therefore, that the Colorado State Medical Society must rely upon the active co-operation and support of its component societies, and that its success depends upon each and every one of these organizations doing its part in full accord with the others. In order to effect this necessary co-operation it is essential that the county and district societies — called constituent societies — act promptly under uniform rules, that their relations to the central body be cordial and intimate, and that their officers keep in close touch with the officers of the State Society. The failure of any one of these constituent societies to do its part at home, by correspondence or sending its reports promptly, is a positive detriment, develops friction and the State Society suffers accordingly.

It was not to be expected that the re-organization, with its complicated machinery and ready-made rules, depending for its success on the complete co-operation of its many parts throughout the state, should be understood and start off without misconceptions and some friction. The experience of the past two years has shown that adjustment and some changes were needed, and at the recent meeting of the State Society the House of Delegates adopted revised by-laws which became effective at once. (See Colorado Medicine, October, 1904, page 363.) A revised constitution was passed upon, but, under the rule, this must lie over one year before it may be adopted. In this revision only minor changes in detail and form were made, and these solely with a view to a better understanding of the organization, and the more harmonious working out of the general plan, which was not modified in any particular.

At the same time this Committee on Organization was appointed with instructions to communicate with the constituent societies, acquaint them with the revision, and suggest to them the adoption of such uniform rules as will lead to a more complete correlation of the component parts of our organization, and, as a consequence, a more successful State Society. Only when this is effected may each society and each member enjoy equally the privileges and benefits which accrue from the operations of a strong, successful organization. The committee begs to solicit the active interest of the officers and members of constituent societies in these matters, and call their attention to the revised by-laws, a copy of which is enclosed. It is earnestly recommend that to assist in perfecting our organization, the following rules be promptly adopted by your society, and introduced into its constitution and by-laws, if not already contained therein:

1. That the annual meeting and election of officers be held in January of each year, and as soon after the first of the month as convenient.
2. That it shall be the first duty of the secretary, after the annual meeting, to report the list of officers elected by the society to the secretary of the State Society.
3. That the annual dues be made payable January 1, and delinquent July 1 of each year.
4. That all members delinquent in dues on July 1 shall, without action of the Society, be held suspended and not in good standing.
5. That it shall be the duty of the secretary to make his annual report to the secretary of the State Society not later than September 1 of each year. (See Chapter XII, Section 8, Revised By-Laws.)
6. That delegates to the State Society shall be elected for a term of two years, and any society entitled to more than one delegate elect one-half, as near as may be, each year. (Chapter V, Section 2, Revised By-Laws.)
7. That "Every reputable and legally qualified physician residing within its jurisdiction, who does not practice or claim to practice and agrees not to practice sectarian medicine," shall be entitled to membership. (Chapter XII, Section 5, Revised By-Laws.)
8. That a member of a constituent society of this state be accepted by another constituent society upon presentation of a proper transfer card, without delay or duplication of dues.

It is very necessary that the State Secretary receive the annual reports from the constituent societies well in advance of the state meeting, that he may properly prepare for it. It is therefore desirable that the officers of these societies be elected early in the year, that they may be known to the State Secretary, and have time to become sufficiently acquainted with the duties of their offices and the affairs of their society to effectively co-operate with him in the preparations for the annual meeting. Also, reports prepared by the secretary from his own data will be more complete and serviceable than if he has to depend on those collected by his predecesor.

It should be understood that a person joining a county or district society joins the State Society at the same time, and the charge for joining the society, as well as its annual dues, should include the $3.00 per capita assessment for the State Society, and be made payable in advance. The State Society requires that all dues shall be paid through the secretary of the local society and shall accompany his annual report, with the list of members, in advance of the state annual meeting, and not later than September 1 of each year. If not thus paid, members of a delinquent society. as well as members delinquent in a society making its report and paying its assessment, are not to be permitted to register or take any part in an annual meeting, and lose their membership in the American Medical Association. Dues for the year must therefore be paid to the local secretary long enough before September 1 to allow the secretary to make up his report, and as he is required at the same time to forward the amount of the per capita assessment for each member in good standing, there must be some anterior date agreed upon on which a member becomes delinquent and suspended, and July 1 appears to be the preferable time. Any further penalty and the matter of re-instatement is left to the discretion of the local society.

A further reason for prompt payment, avoidance of delinquency, and accuracy in the report of the secretary is that the secretary of the State Society is required by the Secretary of the American Medical Association to check off the members of the Association each year, and persons whose annual assessments for the State Society have not been received are dropped by the Association. **A physician can not be a member of the American Medical Association without being a member in good standing in his county and state society.** (See Constitution, American Medical Association, Articles III and IV.)

Further, the Association plans to publish a directory or "Blue Book" containing only the names of members of county and state societies of record January 1, 1905, checked up from lists of the secretaries of state societies. (See Journal American Medical Association, June 18, 1904, page 1645.) This should be a stimulus for the enlargement of the membership of all county societies and for delinquents to be reinstated. All such names, with the yearly assessment for 1904, should be sent to Dr. J. M. Blaine, State Secretary, as soon as possible.

This committee would respectfully urge the officers and members of your society to take these matters up in meeting at once, and at the earliest possible date incorporate the above suggestions in the laws governing the society. It is most desirable that the machinery of organization be placed in smooth working order in advance of another annual meeting. If this is properly done we may expect a banner meeting at Colorado Springs next year, one which will mark the complete success of our present organization.

The committee desires to do everything possible to bring about a uniform adjustment between the State Society and its constituent societies, and if further explanation of the matters at issue is desired, will be pleased to enter into direct correspondence with any society.

Very respectfully,
W. A. JAYNE,
Chairman,
EDWARD JACKSON,
JAMES M. BLAINE,
Committee on Organization.

416 McPhee Building, Denver, Colo., November 9, 1904.

COUNTY MEDICAL SOCIETIES.

Dead or sleeping? The following letter from the secretary of one of our county medical societies, in a thickly settled, prosperous part of the state, is published now without comment. But it raises questions worthy of careful consideration and extended discussion, which will receive attention in the early numbers of Colorado Medicine.

Dear Doctor: Some time since I received a communication from you asking reports of the meetings of the .... County Medical Society. I am sorry to confess that our society is not an actively working organization. At the August meeting we managed to get an attendance of six members. During the month of September I was absent (at St. Louis) and no meeting was held. For October the secretary notified every member of the society by postal card that a meeting should be held on the last Monday night of October. Three members reported—being a bare quorum—no business was finished. As secretary of the society, I will, of course, call a meeting for the last Monday night of November, and also for the annual meeting on the last Monday night of December, when officers for the year of 1905 should be elected. I am not prepared to say why the .... County doctors take so little interest in their society. I certainly have worked very hard during all of the last ten years to keep it up, and failing, I am very much discouraged. The society has met in my office ever since its organization. During two years now past I have been its secretary. I am an old man, with forty years of very active practice behind me now, and need a medical society less than any man in the county. This, dear doctor, is my reason for not sending reports—there are none. Because I positively know that it has not been through any neglect of duty on my part that the .... County Medical Society, save on paper, is moribund.

Yours truly,
....
Secretary ...... County Medical Society.

Boulder. The Boulder County Medical Society met in regular session at the County Court House, October 6, at 8 p. m., President Dr. W. W. Reed in the chair. Those present were Drs. Reed, Queal, Giffin, Rodes, Miles, Ambrook, Bell, Wood, Trovillion, Farrington and Gilbert.

After the usual routine business was transacted, a case of **Fracture of the Spinal Column** was reported by Drs. Giffin and Miles. The case was that of a young Russian, about 20 years of age, coal miner by occupation, upon whom a large lump of coal, estimated at one ton in weight, had fallen from a distance of several feet above, striking him across the shoulders while in a crouching position.

There was a decided angle in the spinal column at the junction of the thoracic and lumbar portions with its convexity posteriorly. There was evidence of crushing-in of the bodies of two or more vertebrae by the indirect violence which they had sustained. There was complete paraplegia, and as the case now appears, a complete destruction of the cord at that point, as no reflexes have returned after a period of nearly four weeks. There was a zone of slight hyperesthesia extending downward and forward over the distribution of the ilo-hypogastric nerve, which soon disappeared. Although the beginning cauda equina was evidently badly crushed, the destruction was not complete, for sensation has returned over the area of the distribution of the remainder of the ilo-hypogastric and over that of the genitocrural nerves.

The fracture was reduced as far as thought advisable by the simple method of placing the patient upon an inclined plane (head downward) with a firm soft support beneath the bulging part and enough counter-extension made to overcome the tendency to slide downward. After perhaps twenty minutes in this position the muscles had so relaxed that with a very slight amount of manipulation the deformity was to a great extent reduced, and plaster of paris jacket put on.

There was at first a retention of urine and feces but later, incontinence, which continued. There is now beginning to be a cystitis which is combatted as far as possible by irrigation of the bladder with a mild antiseptic, but the incontinence is no doubt due to trophic disturbances. The paralysis is still complete in every particular below the points mentioned.

Dr. Miles mentioned the fact that the spinal cord had been experimentally cut and then sutured in some instances, and that there had been, after several months, considerable regeneration, seeming to refute the accepted idea that there is no regeneration in the central nervous system.

Dr. Trovillion reported the case of a man who came under his care a year and one-half after a reported fracture of the spinal column in three places, the fractures having been wired. The man was then almost completely paraplegic, but afterwards recovered to the extent of being able to walk quite well, though with a very peculiar gait There were unfortunately no details of the case obtainable.

Dr. Giffin was the essayist of the evening on the **surgical treatment of appendicitis**, Dr. White, of Longmont, who was to have had a paper upon the medical treatment, being absent. Dr. Giffin considered all cases of appendicitis were surgical, and should be operated upon, either within the first twenty-four or thirty-six hours of the attack, unless treated through the attack by the Ochsner method and then operated upon in the interval. In this way there is a very slight mortality from the disease. The only indications for an operation between these periods were the pointing of an abscess or evidence of perforation and general peritonitis.

He was very enthusiastic in his approval of the Ochsner plan, except that it often led people to believe that they could get along without operation, and refuse the interval operation. He preferred the muscle-spliting operation, if the adhesions are not too extensive; then more room is needed.

As to the appendix itself, he simply ties it close to the base, cuts it off, and cauterizes the stump. He does not drain unless there is good evidence of infection.

During the discussion there was practically no opposition offered to this plan of treatment. There was some difference of opinion, however, as to whether nutrient enemeta were necessary at all, simply the saline solution being given by enema; or if the patient took water well, even this could be dispensed with.

There was also some difference of opinion as to whether the enemeta need be given high or not, several reported satisfactory results from low enemeta providing they were not large, and a little tincture of opium added to them.

Dr. Giffin favored the free use of morphine hypodermically while pain lasted.

The meeting adjourned to meet again on the evening of the first Thursday of November.

Denver.—The Medical Society of the City and County of Denver omitted its regular meeting of October 4 on account of the annual meeting of the State Medical Society. On October 18 the following papers were read:

Aestivo Autumnal Malaria. Dr. D. Macdougall King read a paper upon this subject, reporting a case that had occurred in Denver. The patient was a young man who had recently come to Colorado from Missouri. He gave a history of an illness two years previously which had been diagnosed typhoid fever, but seemed rather to resemble malaria. In this attack the diagnosis between typhoid and malaria depended upon the blood examination. The Widal test gave a negative result, but the crescent forms of the malarial parasite were found in the blood. Having thus reached a positive diagnosis, quinine bisulphate was given hypodermically, according to the method recommended by Osler. After this treatment was instituted two additional paroxysms of reduced severity occurred before the patient was cured. A month later, however, another attack occurred, marked by extreme pain, localized in the region of the stomach. This pain continued very severe for three days, and then gradually diminished under anti-malarial treatment. The patient presented no indications for surgical interference.

Dr. J. R. Arneill demonstrated specimens of blood containing malarial parasites. He had recently seen two cases of malaria occurring in Colorado in people who had recently come to this state; and a third case in which the diagnosis of malaria had been made, but which proved to be a case of typhoid fever. He emphasized the importance of a blood examination for the recognition of these diseases.

Dr. C. E. Edson thought that in Colorado it might be worth while to guard malarial patients from being bitten by mosquitos, and thus giving rise to a focus of infection. He had known of the infection of a region of Massachusetts in this way.

Dr. J. N. Hall said that here in Colorado malignant attacks, pernicious chills, may occur in these important cases. He had seen two cases of the kind in which the patients were cold and pulseless at the wrist. Both had recovered after the use of quinine hypodermically. In such cases, if the diagnosis was fairly clear, no time should be lost in making a blood examination, but the hypodermic use of quinine should be begun immediately.

Dr. W. N. Beggs questioned whether the anopheles, the mosquito liable to carry malaria, was to be found in this district. He thought that in typical cases of malaria the diagnosis was no more dependent upon a blood examination than was the diagnosis of typical cases of typhoid fever or other diseases. In atypical cases such examination might be necessary.

Dr. Arneill called attention to the enormous number of atypical cases requiring such an examination. In the Spanish-American war a very large percentage of cases that had been reported as malaria were proven by such examination to be cases of typhoid fever.

Dr. King, in closing ,said that with a microscope and examiner at hand the examination could be made without loss of time, and especially in the pernicious form where the blood would be found loaded with the parasites.

Intestinal Toxemia in Typhoid Fever and its treatment, was the subject of a paper by Dr. R. T. Ramsey. There was no specific for typhoid fever, but the important question was; how can best be met the toxemia of the disease? Sponging and the cold bath were important measures. For the latter he had used a tub of buggy oil cloth, which was much cheaper and easier to obtain than sheet rubber. In addition to its employment as a laxative in the first stage of the disease, he found that calomel had a distinctive field of usefulness when there was evidence of general poisoning from the intestine. He gave it in doses of 1/8 grain every two hours.

Dr. B. F. Wooding had found that the high estimate placed upon the Brand treatment of cold bathing was erroneous, and that this method had not lessened the mortality.

Dr. W. N. Beggs believed that we could not, from the disease-history of the case, estimate the extent and severity of the lesions present.

Tuberculosis and Epilepsy. Dr. M. Collins reported the case of a young woman in the first stage of phthisis, who also suffered from epilepsy. On first coming to Colorado she had improved, but now she seemed to be at a standstill and signs of dementia and loss of memory were beginning to appear.

Dr. S. D. Hopkins had seen four cases of epilepsy in tuberculosis patients. Three suffering from grand mal seizures, and one from petit mal.

Tuberculosis in Husband and Wife. Dr. Collins did not believe in the contagiousness of pulmonary tuberculosis. He had seen in some 1,000 cases of tuberculosis but two in which both husband and wife were affected under circumstances that indicated its transmission from one to the other. In a case recently seen the wife had contracted the disease since coming to Colorado with her sick husband.

Dr. W. N. Beggs had seen eight cases in which husband and wife were thus affected.

Fremont County Society. The regular meeting night of the Society occurring very near the general election, it was deemed best by the committee in charge to set the date one week earlier. The following members were present, at Canon City, on the evening of October 31: Drs. Little, Palmer, Moore, Graves, Emory, Phelps, Cannon, from Canon City; Drs. Rambo, Paxton, Edwards, Condit, from Florence; Dr. Williamson, from Rockvale, and Dr. Rowe, from Salida.

President Little invited the members of the Society to supper with himself and Mrs. Little, at 8 o'clock, after which the meeting adjourned to the doctor's office, where the following program was discussed.

Program. Dr. Rambo—"What should be the attitude of a consultant, with regard to a case seen in consultation, after the patient has dismissed his regular attendant: (1) If requested by attendant to take charge of case; (2) If family has asked him in consultation?"

Dr. Little—"What should be the conduct of a physician with regard to retaining case, if left in charge by a colleague during his illness or absence, (1) If during continuance of illness of patient; (2) If requested in future to take charge of other illness in patient's family?"

Dr. Moore—"The conduct of the consultant toward the attending physician; also the conduct of attendant toward consultant."

Dr. Graves—"The relation of the specialist to the general practitioner."

Dr. Palmer—"What should be the attitude of a physician toward the mention of his name in the newspapers."

Dr. Paxton—"Should a regular consult with a homeopath or other irregular?"

The Society extended a vote of thanks to Dr. and Mrs. Little for their delightful entertainment of the Society.

ROYAL C. ADKINSON, M. D., Sec'y.

Pueblo. The Pueblo County Medical Society met in regular session Tuesday evening, October 17. Dr. T. A. Stoddard read a paper on **The Pulse,** and gave many original and practical points in diagnosis and prognosis which may be elicited by careful examination of the pulse. The reading of the paper was followed by a general discussion by the Society.

A communication was read from the Colorado Medical Legislative League asking the Society for financial aid, and the Society voted them twenty dollars from the treasury.

A committee was appointed to interview the resident candidates for senate, legislature and governor, and obtain their views on medical legislation; the committee to make report to members of the Society.

A committee was appointed to confer with the mayor and city council concerning the appointment of a city bacteriologist.

MADISON KEENEY, Sec'y.

OTHER MEDICAL SOCIETIES.

The Denver Clinical and Pathological Society.—The annual meeting of The Denver Clinical and Pathological Society was held October 14. The Committee on Membership reported the election of Dr. Henry Sewall. The election of officers resulted as follows: President, Dr. E. C. Hill; First Vice President, Dr. C. E. Edson; Second Vice President, Dr. I. B. Perkins; Secretary, Dr. F. W. Kenney; Treasurer, Dr. J. A. Wilder.

Dr. Stover exhibited a number of **skiagraphs,** among them being one of an anomalous bone of the ankle called the os-trigonumtarsi, and two of chronic syphilitic osteomyelitis of the humerus and femur respectively.

Dr. Perkins exhibited a **specimen of an appendix** from a recurrent case of some years standing, which showed an old slough near the cecum. Discussed by Dr. Freeman.

Dr. Coover exhibited four specimens of **enucleated eyes,** the first containing a piece of rock, the second, third and fourth containing fragments of steel.

Dr. Fleming exhibited a mass of **tuberculous glands.**

Dr. Levy exhibited an instrument for **demonstrating to classes the laryngeal image.**

Dr. Kenney exhibited a **new anesthetic** called somnoforme, also an inhaler for administering the anesthetic, and demonstrated the same before the Society.

Dr. Delehanty reported a case of **exophthalmic goiter** in a woman, treated with anti-thyroidin for one week, resulting in a decrease in the size of the mass one-half inch, and of the pulse rate from 130 to 108. Discussed by Drs. Whitney, Hall, Pershing, Lyman and Delehanty.

Dr. Pershing reported a case of **hysterical blindness** in a patient having a visual defect, treated by suggestion with recovery. Discussed by Drs. Black and Pershing.

Dr. Blaine reported a case of **actinomycosis,** in which the ray fungus was not found at autopsy. Discussed by Drs. Hall and Wilder.

Dr. Hershey discussed the action of Burnham's **soluble tincture of iodine** and recommended its use as a substitute for iodide of potassium. He also reported a case, unable to take the iodide, treated successfully with the iodine. Discussed by Drs. Levy, Kleiner, Bonney, Hill and Coover, the latter calling attention to a tablet representing grains 5 K. I., and called iodo-neucleoid, as a substitute for K. I.

Dr. Hickey reported a case of **syphilis,** treated unsuccessfully with inunctions and internal medicine, which yielded to the salicylate of mercury hypodermically. Discussed by Dr. Black. F. W. KENNEY, Sec'y.

NEWS ITEMS.

The State Board of Medical Examiners. Dr. C. F. Stough, of Colorado Springs, a representative of the homeopathic school upon the board, has resigned; and Dr. Terry C. Hedges, of Grand Junction, has been appointed by the governor to fill the vacancy.

Hospital Saturday and Sunday come this year on November 26 and 27. The Hospital Saturday and Sunday Association of Denver will devote Saturday to collection of funds for the hospitals in the business section of the city, and on Sunday will make its collections through the churches.

The typhoid epidemic at the Camp Bird mine, near Ouray, seems to have had its origin in the contamination of the water supply, through the occupancy of a deserted camp upon the mountain above the source of supply, by men suffering from typhoid fever. Cases occurring among those who did not live at the mine have been traced to visiting there and drinking of the contaminated water.

Where next? Some time ago two sharpers traveled the Holbrook Valley, in Otero county, and by setting forth claims as specialists of eye, ear, nose and throat diseases, swindled the farmers out of sums ranging from $10 to $50. The secretary of the county medical society,as soon as he heard of the circumstance, swore out warrants for their arrest; but the sheriff found they had traveled on.

Enforcing the law. Some months ago the secretary of the Otero County Medical Society looked up the registration of the physicians of the county, and discovered that out of the thirty-three practitioners in the county, eight were not registered. Letters were sent to all the delinquents; and, as a result, all are now registered, except one who will be brought before the court at the first opportunity.

BOOKS.

Progressive Medicine, Vol. II, June, 1904; edited by Hobart Amory Hare, M. D., octavo, 334 pages, 47 illustrations; per annum, cloth bound, $9; paper, $6. Lea Brothers & Co., Philadelphia and New York.

The present volume contains a review of the progress in Surgery of the Abdomen, including Hernia, by W. B. Coley; in Gynaecology, by J. G. Clark; Diseases of the Blood, Spleen, Thyroid, Lymphatic System, and the Diathetic and Metabolic Diseases, by Alfred Stengel, and Ophthalmology, by Edward Jackson.

The articles maintain the high standard previously set in this publication, the peculiar excellence of which lies in the presentation of the new work in each subject as a whole, with a due sense of proportion and appreciation of the relative value of the papers reviewed. It is just this authoritive presentation which is needed by the general reader, and which is wanting in a merely formal series of abstracts. No one wishing to keep intelligently abreast of scientific medical advance can afford not to read carefully these volumes. C. E. E.

Hand-Book of the Anatomy and Diseases of the Eye and Ear—By D. B. St. John Roosa, M. D., L. L. D., and A. Edward Davis, A. M., M. D., of New York. $1.00. F. A. Davis & Co., Philadelphia, Pa.

This little book of 300 pages, without illustrations, is based on the authors' long experiences as post-graduate teachers. It presents in a clear and attractive way the essentials of the anatomy and diseases of the eye and ear.

E. W. S.

Diseases of the Nose, Throat and Ear and Their Accessory Cavities—By Seth Scott

Bishop, M. D., D. C. L., LL. D.; third edition; thoroughly revised, rearranged and enlarged; ninety-four colored lithographs and 230 additional illustrations; 564 pages, 8 vo.; cloth, $4; sheep or half Russia, $5. F. A. Davis & Co., Philadelphia.

In the words of its author, "This work was designed first, to help students in preparing for their degree; second, for those progressive practitioners who wish to acquire the proficiency necessary to properly treat those patients who are unable to visit specialists; and third, for those who are gradually exchanging their general practice for special work in these branches. It is hoped to serve the interests of specialists in bringing information down to the present date, and as a work of ready reference." It is within the truth to say that the book accomplishes its purpose.

Each edition has been better than its predecessor in text, printing, number and clearness of illustrations. In the last the title and rearrangement are changed so as to consider the ear and its diseases last, rather than first. The two chapters on hay fever are made especially interesting by the collection of many medical opinions on its causation and appropriate treatment.

Related diseases of the Eye and Nose, Life Insurance Affected by Diseases of the Ear, Nose and Throat, and Remedies, are the suggestive titles of chapters. And those dealing with the Mastoid Process and Mastoid Operations are even a slight improvement over these chapters in former editions, which means that the book is worth its price, for this section only. G. F. L.

Practical Electro-Therapeutics—By Franklin B. Gottschalk, M. D., Professor of Diseases of Children at the Jenner Medical College, Etc., Chicago; 12 mo., 331 pages; illus-
Electro-Therapeutics is here taken to in-
trated. T. Eisele, 1904.
clude the application of the X-rays, of light from the Finsen and ordinary electric lamps, and of vibratory stimulation by electric vibrators. One who does not expect to engage extensively in electro-therapeutics will find the rationale underlying these forms of treatment clearly and concisely stated in this volume, along with explicit advice as to apparatus and adequate directions regarding the therapeutic applications of these agencies. It is one of the very best manuals of its class. It is abundantly illustrated and well printed. But as a piece of literary work it is marred by lack of systematic arrangement, the absence of any table of contents, and an inadequate index.

Text Book of Physiological Chemistry for Students and Physicians—By Charles Simon, M. D., Baltimore; second edition; revised and enlarged; 8 vo., 500 pages. Lea Brothers & Co., Philadelphia and New York, 1904.

The rapid development of this branch of medical science in the three years that have elapsed since the appearance of a first edition of the work, has rendered necesary the re-writing and extension of some of its most important chapters. There has also been added an appendix of some forty-eight laboratory exercises, described in such detail as to render possible their performance with but little, if any, assistance from an instructor. To the physician who has an especial interest in physiological chemistry, or desires to work up the composition of some particular tissue or system, this book can be heartily recommended.

Davis' Obstetrics—A Treatise on Obstetrics—For Students and Practitioners—By Edward P. Davis, A. M., M. D., Philadelphia; octavo, 800 pages, with 274 engravings and 39 full-page plates in colors and monochrome; cloth, $5; leather, $6. Lea Brothers & Co., Philadelphia and New York, 1904.

The second edition of Dr. Davis' popular book, with its chapters re-written and its 250 additional pages, comes to us practically a new work on obstetrics. An extensive experience in practice, many years of teaching of the subject, both to individuals and to large classes, and a long training in editorial work, have fitted the author to write a clear, comprehensive treatise. And he has given to the work the necessary time and labor. In the production of an authorative text-book, as in his occupancy of the Jefferson College Professorship, he is a worthy successor of Meigs and Parvin. On all important points Dr. Davis has positive convictions, and does not hesitate to enforce them upon his reader or student. One who has mastered the book will have an excellent knowledge of obstetrics, and the practitioner who refers to it, with the aid of its complete index, will not be disappointed in the consideration it gives to any practical point.

Nagel's Epitome of Nervous and Mental Diseases—A Manual for Students and Physicians—By Joseph Darwin Nagel, M. D., New York; 12 mo., 276 pages, with 46 illustrations; cloth, $1. Lea Brothers & Co., Philadelphia and New York, 1904.

To appreciate the advances in nervous and mental disease, that are being recorded from month to month in current medical literature. the physician who is not giving special attention to them needs a diagrammatic presentation of the subject, in connection with which new information can be arranged and made of practical value. Other volumes of this series, and their general plan and scope, have been previously noticed. This little book gives such a presentation. Its well-chosen illustrations present characteristic clinical types of disease and schematic presentations of nerve tracts and connections.

Manual of Materia Medica and Pharmacy, by E. Stanton Muir, Ph. G., M. D. Third Edition, revised and enlarged. Philadelphia; F. A. Davis Co. 1904.

This book, of 192 octavo pages, is especially designed for the use of practitioners and medical, pharmaceutical, dental and veterinary students. It consists of three parts: Part I is a series of definitions and general statements.

Part II includes drugs and pharmaceutical preparations of recognized therapeutic value and in general use. These are arranged alphabetically, the name, description, official preparation, active principles, incompatibilities, therapeutic action, toxicology, antidotes, and doses, being briefly and clearly stated. The doses are given not only for the adult human being, but also for the horse, dog and other domestic animals for which the particular drug is commonly used. The information regarding therapeutic action that it is possible to convey in a single word or sentence, is, of course, extremely meager, unsatisfactory, and often misleading.

Part III, on Pharmacy, describes the different classes of preparations and some of the methods of their manufacture with the more important formulas. This work will serve the over-crowded student in preparing for examination, or the practitioner who wishes to refer to information which it contains that is not found in his books on medicine and therapeutics.

Genito-Urinary and Venereal Diseases and Syphilis.—By Robert W. Taylor, A. M., M. D., Clinical Professor of Genito-Urinary Diseases in the College of Physicians and Surgeons, New York. Third Edition, revised and enlarged. Octavo, 757 pages, with 163 illustrations and 39 plates in colors and monochrome. Lea Brothers & Company, Philadelphia and New York. 1904.

Taylor's book, always notable for its illustrations, appears in this edition with 25 new cuts in the text, and 12 additional plates. These plates, chiefly photographic reproductions in monochrome, are notably good. Taylor's book is exceptional in treating in one volume these diseases as they occur in both sexes. The chapters on Syphilis of the Eye and Ear have been prepared by Dr. Ward A. Holden, the well-known ophthalmologist and otologist.

Magee and Johnson's Epitome of Surgery.—A manual for Students and Practitioners.—By M. D'Arcy Magee, A. M., M. D., and Wallace Johnson, Ph. D., M. D., Washington, D. C. 12 mo., 287 pages, with 129 engravings. Lea Brothers & Company, Philadelphia and New York. 1904.

This is the surgical volume of Lea's Medical Epitome Series. It is not designed to take the place of larger text-books, but may be conveniently consulted when a larger work would not be available. To assist the student in self-quizzing, a series of questions is introduced at the end of each chapter. By stating things in a simple, direct, dogmatic way, and using illustrations instead of long descriptions, a large amount of information is given in this small volume. The concluding chapter treats of The Diagnostic Use of the X-Ray in Surgery.

The Physicians' Visiting List. 1905. Philadelphia; P. Blakiston's Son & Co. This, in addition to its convenient visiting list and special memoranda, contains the usual tables; the dose table having been revised to accord with the new U. S. Pharmacopaeia (1900). It is published in various editions suited to 25, 50 or 100 patients per week. For a visiting list that has reached its 54th year of publication little need be said except to remind the busy practitioner that it is time to prepare for the new year.

Manual of Serum Diagnosis—By Dr. O. Rostoski, University of Wurtzburg; authorized translation by Dr. Charles Bolduan; 12 mo.; VI; 86 pages; cloth, $1.00. New York; John Wiley & Sons. 1904.

The physician in general practice or interested in internal medicine needs to know something of serum diagnosis, even though he may not have the experience or the laboratory facilities for making the actual tests. This little book is divided into chapters upon General Considerations, Typhoid and Paratyphoid, Agglutinations in Other Diseases, The Precipitins as Diagnostic Agents and Other Diagnostic Reactions. Besides giving an excellent survey of the subject in the text the numerous references enable the student to carry his studies into the whole literature of this and closely related topics. The book is printed in large type making it easy reading.

The Blues, Splanchnic Neuresthenia; Causes and Cure—By Albert Abrams, A. M., M. D., formerly Professor of Pathology in the Cooper Medical College, San Francisco; 12 mo.; 240 pages; illustrated; cloth, $1.50. New York, E. B. Treat & Co.; 1904.

The successful practice of medicine will always consist in the management of patients, rather than the naming of diseases, and the administration of the specific drugs. Abram's book forces upon the physician attention to a series of pathologic phenomena that too often he is inclined to relegate to the list of unpleasant peculiarities on the part of the patient. It is very easy to get into the habit of thinking that the patient is to blame for certain of his troubles, or that they are incurable; and therefore the physician need feel no responsibility regarding them. This book is a good antidote for this dangerous mental attitude toward some of the most real ills from which our patients suffer. It brings out, well, the importance and the best methods of removing weakness and deficient development in the abdominal muscles. After giving five chapters to neurasthenia in general, the remaining three are devoted to the special subject of Splanchnic Neurasthenia. The 13 illustrations help to render clear important clinical facts and methods.

A Compend of Medical Latin, Designed for Medical Students—By W. T. St. Clair, A. M., Louisville, Ky., Second Edition; 12 mo.; 131 pages; $1.00. Philadelphia; P. Blakiston's Son & Company; 1904.

This is one of "Blakiston's ?Quiz Compends?" While ostensibly offered to the medical student, it may prove of service to the practicing physician whose knowledge of Latin is not sufficient to meet all the needs of prescription writing. It contains a condensed but clear treatise on the grammar of the language, derivations, and a sufficient vocabulary.

Blood Pressure, as Affecting Heart, Brain, Kidneys and General Circulation—By Louis F. Bishop, A. M., M. D., Physician to Lincoln Hospital, N. Y.; 12 mo.; 112 pages; $1.00.

Disturbances of blood pressure appear to be the essential factors in the production of a class of diseases, the importance of which has of late years, found growing appreciation in medical literature. Bishop's manner of considering his subject reminds one very much of the work of J. Milner Fothergill. One cannot read his monograph without getting a more general grasp, a broader view of the essential facts regarding blood pressure.

Surgical Treatment of Bright's Disease—By George M. Edebohls, A. M., M. D., Professor of Diseases of Women in the New York Post Graduate School and Hospital; 8 vo.; 340 pages. New York; Frank F. Lisiecke; 1904.

This volume presents in good shape the claims and important facts relating to operation, particularly decapsulation of the kidney, as a method of treatment for chronic nephritis. It brings together most of the important papers that have been published upon the subject and presents in detail some seventy-two cases. The book is essential to any one who desires thoroughly to post himself upon the subject.

COMMITTEES OF THE COLORADO STATE MEDICAL SOCIETY.

Dr. Frank Finney, President of the State Medical Society, has appointed the following committees to serve for the year 1904-1905:

Committee on Scientific Work:

Dr. George W. Meil, Denver, Chairman.
Dr. S. E. Solly, Colorado Springs.
Dr. J. M. Blaine, Denver.

Committee on Credentials:

Dr. J. M. Blaine, Denver, Chairman.
Dr. W. T. Little, Canon City.
Dr. C. K. Fleming, Denver.

Committee on Public Policy and Legislation:

Dr. C. H. Catherwood, Denver, Chairman.
Dr. S. D. Van Meter, Denver.
Dr. W. H. Swan, Colorado Springs.
Ex-Officio:
Dr. Frank Finney, La Junta.
Dr. J. M. Blaine, Denver.

Committee on Auditing:

Dr. S. G. Kahn, Leadville, Chairman.
Dr. C. A. Powers, Denver.
Dr. Hubert Work, Pueblo.

Committee on Necrology:

Dr. C. D. Spivak, Denver, Chairman.
Dr. W. W. Reed, Boulder.
Dr. H. R. Bull, Grand Junction.

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